



State of New Jersey

PHIL MURPHY
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
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SHAWN M. LATOURETTE
Commissioner

SHEILA OLIVER
Lt. Governor

Via Email Only

February 28, 2022

Kenneth Lutz, Plant Manager
West Deptford Energy LLC
3 Paradise Rd
West Deptford Twp, NJ 08066

Re: Draft Surface Water Renewal Permit Action
Category: B - Industrial Wastewater
NJPDES Permit No. NJ0171905
West Deptford Energy Station
West Deptford Twp, Gloucester County

Dear Mr. Lutz:

Enclosed is a **draft** NJPDES permit action identified above which has been issued in accordance with N.J.A.C. 7:14A.

Notice of this draft permit action will appear in the *Gloucester County Times* and in the March 2, 2022 *DEP Bulletin*. The *DEP Bulletin* is available on the internet at <http://www.state.nj.us/dep/bulletin>. In accordance with N.J.A.C. 7:14A-15.10(c)1i, the public comment period will close thirty days after its appearance in the newspaper.

As detailed in the *DEP Bulletin* and aforementioned newspaper, written comments or a request that the Department hold a non-adversarial public hearing on the draft document, must be submitted in writing to Susan Rosenwinkel, Bureau Chief, Mail Code 401-02B, Division of Water Quality, Bureau of Surface Water & Pretreatment Permitting, P.O. Box 420, Trenton, NJ 08625-0420 or to Susan.Rosenwinkel@dep.nj.gov by the close of the public comment period. All persons, including the applicant, who believe that any condition of this draft document is inappropriate or that the Department's tentative decision to issue this draft document is inappropriate, must raise all reasonable arguments and factual grounds supporting their position, including all supporting materials, during the public comment period. The Department will respond to all significant and timely comments upon issuance of the final document. The permittee and each person who has submitted written comments will receive notice of the Department's final decision to issue, revoke, or redraft the document.

If you have questions or comments regarding the draft action, please contact Robert Hall either by phone at (609) 292-4860 or email at Robert.Hall@dep.nj.gov.

Sincerely,

A handwritten signature in black ink, reading "Muhammad N. Shaikh". The signature is written in a cursive style with a large, stylized 'M' and 'S'.

Muhammad N. Shaikh
Environmental Engineer 4
Bureau of Surface Water & Pretreatment Permitting

Enclosures

c: Permit Distribution List
Masterfile #: 64901; PI #: 476539

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List of Acronyms

ACR	Acute to Chronic Ratio
AML	Average Monthly Limitation
BMP	Best Management Practices
BPJ	Best Professional Judgement
CAP	Capacity Assurance Program
CFR	Code of Federal Regulations
CV	Coefficient of Variation
CWEA/CWA	Clean Water Enforcement Act/Clean Water Act
Department	New Jersey Department of Environmental Protection
DGW	Discharge to Groundwater
DMR	Discharge Monitoring Report
DRBC	Delaware River Basin Commission
DSN	Discharge Serial Number
DSW	Discharge to Surface Water
EDP/M	Effective Date of the Permit/Permit Modification
EEQ	Existing Effluent Quality
ELG	Effluent Limitation Guideline
g/d or g/day	Grams per Day
IEC	Interstate Environmental Commission
IPP	Industrial Pretreatment Program
kg/d or kg/day	Kilograms per Day
LTA	Long Term Average
MA1CD10 or 1Q10	Minimum average one day flow with a statistical recurrence interval of ten years
MA7CD10 or 7Q10	Minimum average seven consecutive day flow with a statistical recurrence interval of ten years
MA30CD5 or 30Q5	Minimum average 30 consecutive day flow with a statistical recurrence interval of five years
mg/L	Milligrams per Liter
MDL	Maximum Daily Limitation
MGD	Million Gallons per Day
MRF	Monitoring Report Form
NAICS	North American Industry Classification System
NPDES/NJPDES	National/New Jersey Pollutant Discharge Elimination System
NJR	New Jersey Register
PCB	Polychlorinated Biphenyls
PMP	Pollutant Minimization Plan
POTW	Publicly Owned Treatment Works
RPMF	Reasonable Potential Multiplying Factor
RTR	Residuals Transfer Report
RQL	Recommended Quantification Levels
RWBR	Reclaimed Water for Beneficial Reuse
SIC	Standard Industrial Classification
SIU	Significant Indirect User
SQAR	Sludge Quality Assurance Regulations
SWQS	Surface Water Quality Standards
TMDL	Total Maximum Daily Load
TR	Total Recoverable
TRIR	Toxicity Reduction Implementation Requirements
USEPA TSD	USEPA Technical Support Document for Water Quality Based Toxics Control (EPA/505/2-90-001, March 1991)
µg/L	Micrograms per Liter
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UV	Ultraviolet
WCR	Wastewater Characterization Report
WER	Water Effects Ratio
WLA	Wasteload Allocation
WWTP	Wastewater Treatment Plant
WQBEL	Water Quality Based Effluent Limitation

New Jersey Department of Environmental Protection
Division of Water Quality
Bureau of Surface Water and Pretreatment Permitting

PUBLIC NOTICE

Notice is hereby given that the New Jersey Department of Environmental Protection (Department) proposes to renew the New Jersey Pollutant Discharge Elimination System (NJPDES) Discharge to Surface Water (DSW) Permit NJ0171905 in accordance with N.J.A.C. 7:14A-1 et seq., and by authority of the Water Pollution Control Act at N.J.S.A. 58:10A-1 et seq., for the following discharge:

<u>Permittee</u>	<u>Facility</u>
West Deptford Energy LLC 3 Paradise Road West Deptford Twp, NJ 08066	West Deptford Energy Station 3 Paradise Road West Deptford Twp, NJ 08066, Gloucester County

The existing facility discharges intake water from the treated effluent flow from the adjacent GCUA facility, a publicly-owned treatment works (POTW), and reuses it for cooling and low volume purposes. The WDES wastewater is discharged to the Delaware River via GCUA's existing discharge structure, designated as DSN 001A in GCUA's permit NJ0024686. The WDES wastewater discharge is combined with the GCUA effluent discharge in the existing GCUA discharge pipe downstream of GCUA's NJPDES internal monitoring at a monitoring point identified herein as outfall DSN002A. The Delaware River is located within the Delaware River Basin and is a tributary to the Delaware bay. The existing facility has a long-term average flow value of 1.4 million gallons per day (MGD), while the daily maximum flow is 3.3 MGD. This action proposes effluent limitations based on a flow of 3.1 MGD.

Modification provisions as cited in the permit may be initiated in accordance with the provisions set forth in Part IV and upon written notification from the Department.

A draft NJPDES permit renewal has been prepared for this facility based on the administrative record which is on file at the offices of the Department, located at 401 East State Street, Trenton, New Jersey. It is available for inspection, by appointment, Monday through Friday, between 8:30 A.M. and 4:00 P.M. Appointment for inspection may be requested through the Office of Records Access. Details are available online at www.nj.gov/dep/opra, or by calling (609) 341-3121.

Written comments or a request that the Department hold a non-adversarial public hearing on the draft document must be submitted in writing to Susan Rosenwinkel Chief, or Attention: Comments on Public Notice NJ0171905, at Mail Code 401-02B, Division of Water Quality, Bureau of Surface Water and Pretreatment Permitting, P.O. Box 420, Trenton, NJ 08625-0420 or to Susan.Rosenwinkel@dep.nj.gov by the close of the public comment period, which closes after publication of this notice in the newspaper. All persons, including the applicant, who believe that any condition of this draft document is inappropriate or that the Department's decision to issue this draft document is inappropriate, must raise all reasonable arguments and factual grounds supporting their position, including all supporting materials, during the public comment period.

The Department will respond to all significant and timely comments upon issuance of the final document. The permittee and each person who has submitted written comments will receive notice of the Department's permit decision.

New Jersey Department of Environmental Protection
Division of Water Quality
Bureau of Surface Water & Pretreatment Permitting

FACT SHEET

Masterfile #: 64901

PI #: 476539

This fact sheet sets forth the principle facts and the significant factual, legal, and policy considerations examined during preparation of the draft permit. This action has been prepared in accordance with the New Jersey Water Pollution Control Act and its implementing regulations at N.J.A.C. 7:14A-1 et seq. - The New Jersey Pollutant Discharge Elimination System.

PERMIT ACTION: Surface Water Renewal Permit Action

The permittee has applied for a NJPDES Surface Water Renewal Permit Action through an application received March 25, 2021.

1 Name and Address of the Applicant:

West Deptford Energy LLC
3 Paradise Road
West Deptford Twp, NJ 08066

2 Name and Address of the Facility/Site:

West Deptford Energy Station
3 Paradise Road
West Deptford Twp, Gloucester County

3 Receiving Water Discharge Location Information:

A copy of the appropriate section of a USGS quadrangle map indicating the location of the facility and discharge point is included towards the end of this Fact Sheet.

Outfall Designator: DSN 002A (a)

General Information		Watershed Information	
Receiving Water:	Delaware River Zone 4	Downstream Confluences:	Delaware Bay
Via :	GCUA Outfall pipe	Receiving River Basin:	Delaware River Basin
Classification:	Zone 4	WMA (b):	18
Latitude:	39° 50' 46.0"	Watershed:	Woodbury/Big Timber/Newton Creeks
Longitude:	75° 13' 26.0"	Subwatershed:	Main Ditch/Little Mantua Creek
County:	Gloucester	HUC 14 (c):	02040202120120
Municipality:	West Deptford Township	303(d) Impairments (d):	Chlordane (fish tissue), DDT (fish tissue), Mercury (fish tissue), Dieldrin
Outfall Description			
Outfall Configuration:	72" Submerged pipe	Submerged Pipe Characteristics:	The outfall is 720 feet from the shoreline and is 17.6 feet below the surface of the water.

Discharge Serial Numbers	Waste Stream Component	Sampling Location Coordinates
DSN 003A	Unit 1 HRSG Blowdown / Evaporative Cooler Blowdown	Latitude 39° 50' 29.6" Longitude 75° 13' 15.1"
DSN 004A	Unit 2 HRSG Blowdown / Evaporative Cooler Blowdown	Latitude 39° 50' 29.6" Longitude 75° 13' 16.8"

Discharge Serial Numbers	Waste Stream Component	Sampling Location Coordinates
DSN 005A	Service Water / Floor Drain Oil Water Separator	Latitude 39° 50' 33.0" Longitude 75° 13' 14.8"
DSN 006A	RO System Regen Blowdown	Latitude 39° 50' 31.9" Longitude 75° 13' 14.5"

Footnotes:

- (a) Outfall DSN002A is the location where the commingled non-contact cooling water and low volume wastewater enters the GCUA discharge pipe. Any reference to DSN001A is referring to the location where the GCUA discharge pipe enters the Delaware River at Lat. 39°51'10.0" and Long. 75°13'32.1" as regulated under a separate NJPDES permit NJ0024686 as issued to GCUA.
- (b) WMA = Watershed Management Area
- (c) HUC 14 = 14 digit Hydrologic Unit Code
- (d) These parameters are listed on Sublist 5 for Zone 4 of the Delaware River as impaired as per New Jersey's 2016 Integrated Water Quality Monitoring and Assessment Report (includes 305(b) Report and 303(d) List).
- HRSG = Heat Recovery Steam Generator, RO = Reverse Osmosis

Applicable Receiving Water Dilution Factors	
Acute (1 hour):	4.1
Acute (3 hour):	4.9

The designated uses for the mainstem Delaware River and Delaware Bay are those contained in "Delaware River Basin Commission, Water Quality Regulations, Administrative Manual - Part III," Article 3, dated October 23, 1996, including all amendments and future supplements thereto and are described below:

Zone 4 is that part of the Delaware River extending from R.M. 95.0 to R.M. 78.8, the Pennsylvania-Delaware boundary line, including the tidal portions of the tributaries thereof.

The quality of Zone 4 waters shall be maintained in a safe and satisfactory condition for the following uses:

1. industrial water supplies after reasonable treatment;
2.
 - a. maintenance of resident fish and other aquatic life,
 - b. passage of anadromous fish,
 - c. wildlife;
3.
 - a. recreation - secondary contact above R.M. 81.8,
 - b. recreation below R.M. 81.8;
4. navigation.

As noted in Section 3 above, this segment of the Delaware River is impaired for Chlordane (fish tissue), DDT (fish tissue), Mercury (fish tissue) and Dieldrin. Available data from the annual WCR requirement demonstrates that this facility showed non-detectable values for all parameters. Therefore, this facility does not discharge any of these parameters through outfall DSN 002A. This permit will require continued sampling on an annual basis for these parameters to ensure that they continue to not be detected in the effluent.

4 Facility Description:

The facility is classified as a major discharger by the Department of Environmental Protection (the Department) in accordance with the United States Environmental Protection Agency (EPA) rating criteria. Based on Discharge Monitoring Report (DMR) Forms from October 2016 through May 2021, the facility's estimated long term average flow is 1.4 million gallons per day (MGD), while the daily maximum flow is 3.3 MGD.

West Deptford Energy Station (WDES) is located on an approximately 302-acre property in West Deptford Township, Gloucester County, New Jersey and operates a combined cycle power generation facility under North American

Industry Classification System NAICS #221112 for Fossil Fuel Electric Power Generation. WDES is designed to generate up to 1,500 megawatts. Phase I of the WDES, which has a capacity of 750 MW, began discharging for commissioning in February 2014 and operating commercially in November 2014. The current design of the WDES has a nominal generation capacity of 714 megawatts and includes up to three gas-fired combustion turbines operating in combined cycle, three black start diesel generators, and two diesel fired emergency generators, which are permitted to operate on #2 diesel fuel up to 500 hours per year.

WDES obtains all of its intake water from the treated effluent flow from the adjacent GCUA facility, a publicly-owned treatment works (POTW), and reuses it for cooling and low volume purposes. The WDES wastewater is discharged to the Delaware River via GCUA's existing discharge structure, designated as DSN 001A in GCUA's permit NJ0024686. The WDES wastewater discharge is combined with the GCUA effluent discharge in the existing GCUA discharge pipe downstream of GCUA's NJPDES internal monitoring at a monitoring point identified herein as outfall DSN002A. The DRBC docket No. D- 2008-027 CP-2, issued on May 8, 2013 authorizes WDES to withdraw up to a design flow of 374.914 million gallons per month of treated effluent from the Gloucester County Utilities Authority (GCUA) pipeline and discharge up to a design flow of 4.051 MGD into the same pipeline. GCUA's internal monitoring point is located at their parshall flume.

The sequence of withdrawals, uses and discharges is as follows:

1. GCUA monitors their treated effluent as it exits the treatment plant at the internal monitoring point, the parshall flume.
2. WDES withdraws a portion of the treated GCUA effluent from the pipeline as its intake water source.
3. WDES may pretreat or chlorinate the intake water to achieve the quality required for WDES operations using biological treatment and filtration.
4. WDES uses the water for cooling and low volume wastewater purposes.
5. WDES separately monitors the low volume wastewater at DSN003A, DSN 004A, DSN 005A, and DSN 006A before it commingles with the non-contact cooling water (NCCW).
6. WDES monitors the commingled discharge of low volume wastewater and NCCW at DSN002A before it enters the pipeline to combine with the GCUA effluent, which consequently enters Zone 4 of the Delaware River at GCUA's DSN 001A.

The reuse water from GCUA will be used primarily for non-contact cooling tower make-up (over 95%) with the remaining being utilized for secondary uses such as boiler make-up.

Primary water consumption is for make-up to mechanical draft wet cooling towers that are employed to reject low grade heat remaining in the exhaust steam emitted from steam turbine-driven electric generators which produce some of the electricity in the combined cycle facility. Continuous blowdown (high volume component) of a portion of cooling tower volume is necessary to limit the cycling effect of evaporation and drift losses.

Secondary water consumption is primarily for production of boiler and evaporative cooler make-up water with a portion used for miscellaneous uses. Boiler make-up water must first be treated via some combination of filtration, reverse osmosis, and mixed bed demineralization to produce the high quality water required for the boilers. High purity water is required to prevent scaling and deposition in the boilers. Concentrate from the reverse osmosis system, low and high pH regeneration wastes from the demineralization system (after neutralization via pH adjustment), and boiler/evaporative cooler blowdown (to further help reduce the potential for scaling and deposition) will be discharged as low volume wastewater through DSN 003A, DSN 004A, and DSN 006A.

Miscellaneous wastewater, also classified as low volume wastewater, which includes wash water from floor and equipment drains and tank containment dike rain water that has come in contact with oil, will first be treated by an oil/water separator before being discharged through DSN005A. Recovered oil collected by the oil/water separator will be removed periodically from the facility by a licensed hauler and disposed in an approved off-site oil recovery and/or waste disposal facility.

The combined discharge of the secondary sources such as demineralizer backwash, reverse osmosis reject, boiler blowdown, and miscellaneous low volume wastewaters from DSN003A, DSN 004A, DSN 005A, and DSN 006A; and cooling tower blowdown (high volume) will be discharged to the existing GCUA discharge pipe via WDES's Outfall 002A, downstream of the GCUA monitoring point for ultimate discharge to the Delaware River. The discharge enters the river at GCUA's DSN001A after combining with GCUA effluent. The discharge from GCUA is authorized separately under permit number NJ0024686.

ELGs are applicable to this facility in accordance with 40 CFR Part 423, for the Steam Electric Power Generating Point Source Category, specifically the New Source Performance Standards at 40 CFR 423.15.

A schematic of the facility's treatment is included near the end of the fact sheet.

Ground water discharges from the infiltration basins consist only of storm water, therefore, a DGW permit is not necessary. If there are any questions regarding the discharge to ground water, contact the Bureau of Groundwater, Residuals and Permit Administration at

Storm water discharges are covered by a general NJPDES Permit, the 5G2-Basic Industrial Stormwater GP-NJ0088315, under an individual authorization identified as NJG0173924. Please contact the Bureau of Stormwater Permitting and Water Quality Management at (609) 633-7021 for any questions concerning stormwater discharges.

5 Type and Quantity of the Wastes or Pollutants:

The Permit Summary Table near the end of this fact sheet contains a summary of the quantity and quality of pollutants treated and discharged from the facility and the proposed effluent limitations.

6 Summary of Permit Conditions:

The proposed effluent limitations and other pertinent information regarding the draft permit are described below:

A. Basis for Effluent Limitations and Permit Conditions - General:

The effluent limitations and permit conditions in this permit have been developed to ensure compliance with the following, as applicable:

1. NJPDES Regulations (N.J.A.C. 7:14A)
2. New Jersey SWQS (N.J.A.C. 7:9B)
3. New Jersey's 2016 Integrated Water Quality Monitoring and Assessment Report (includes 305(b) Report and 303(d) List)
4. Requirements of the DRBC (N.J.A.C. 7:9B-1.5(b)1)
5. Existing permit limitations in accordance with N.J.A.C. 7:14A-13.19 and 40 CFR 122.44 (antibacksliding requirements)
6. Permit limitations in accordance with N.J.A.C. 7:9B-1.5(d) (antidegradation requirements)
7. Statewide Water Quality Management Planning Rules (N.J.A.C. 7:15)
8. Technology Based Treatment Requirements or ELGs Requirements (N.J.A.C. 7:14A-13.2 to 13.4),

Technology based limitations are authorized by Section 301 of the CWA, 40 CFR 122, N.J.S.A. 58:10A-4, and N.J.A.C. 7:14A-13.2(a)1.ii, 13.3(b), and 13.4. In general, technology based effluent limitations are based on ELGs developed by the USEPA, or on case-by-case limitations developed through a BPJ analysis in cases where ELGs are not available or appropriate. ELGs are minimum technology based requirements applicable on a nation-wide basis and are published in 40 CFR Subchapter N. ELGs consider the category of industry that produce common pollutants taking into account the specific factors unique to a particular type of industry (manufacturing process, type and quantity of pollutants generated, types of treatment facilities available to treat the pollutants, etc.). In cases where ELGs are applicable for surface water dischargers, ELG loading limitations are calculated

using the specified concentration value and the production information provided by the permittee. BPJ determinations are authorized by Section 402 (a)(1) of the CWA.

In accordance with N.J.A.C. 7:14A-13.5, WQBELs are imposed when it has been determined that the discharge of a pollutant causes an excursion of criteria specified in the New Jersey SWQS, N.J.A.C. 7:9B-1.1 et seq., and the Federal Water Quality Standards, 40 CFR Part 131. WQBELs are authorized by Section 301 of the CWA, 40 CFR 122, N.J.S.A. 58:10A-4, and N.J.A.C. 7:14A-13.2 and 13.3. The procedures used to develop WQBELs are contained in the State and Federal Standards. Specific procedures, methodologies, and equations are contained in the current USEPA TSD and are referenced in N.J.A.C. 7:14A-13.5 and 13.6.

Expression of all effluent limitations is in accordance with N.J.A.C. 7:14A-13.14 and 13.15.

WET is expressed as a minimum as percent effluent.

B. Basis and Derivation for Effluent Limitations and Monitoring Requirements- Specific:

All permit limitations and conditions in this permit action, are equal to or more stringent than those contained in the existing permit action. As a result, this permit action satisfies the federal and state anti-degradation regulations at 40 CFR 131.12 and N.J.A.C. 7:9B-1.5(d), and no further anti-degradation analysis is necessary.

Monitoring frequencies and sample types are in accordance with N.J.A.C. 7:14A-14, unless specified otherwise in the permit. In accordance with N.J.A.C. 7:14A-14.2, the permittee may submit a written request for a modification of the permit to decrease monitoring frequencies for parameters listed in Part III if site specific conditions indicate the applicability of such a modification.

DSN 002A – NCCW and Low Volume Wastewater

1. Flow:

The existing permit for WDES and this permit renewal do not include a numerical limitation for flow. Monitoring conditions continue to be applied pursuant to N.J.A.C. 7:14A-13.13.

In the May 8, 2013 docket renewal, Delaware River Basin Commission (DRBC) stated that “Effluent limits in any future revised NJPDES Permit are expected to reflect an average flow of 3.1 MGD.” As a result, this permit renewal, as well as the 2016 renewal permit action, continues to recognize the increase in the facility’s estimated long term average flow from 2.0 MGD to 3.1 MGD.

The monitoring frequency shall be **continuous** and the sample type shall be **metered**.

2. pH:

The effluent limitations of 6.0 standard units (s.u.) as a minimum and 9.0 s.u. as a maximum are based on the Steam Electric ELGs at 40 CFR Part 423.15 (a)(1) and are consistent with the Effluent Quality Requirements of the DRBC Water Quality Regulations, Section 4.30.5.

The monitoring frequency of **once per month** is being carried forward from the existing permit. The sample type shall be **grab** and is in accordance with N.J.A.C. 7:14A-14.2.

3. Total Suspended Solids (TSS):

The existing concentration limitation of 60 mg/L as a monthly average is being carried forward from the existing permit and is in accordance with the DRBC regulations at 3.10.4.D.2(i). It was requested by the DRBC in an email correspondence from David Kovach with the Department dated June 29, 2015. This limitation was granted by the DRBC at the request of the permittee in lieu of the standard 30 mg/L effluent limitation at 3.10.4.D.1(i) that was initially imposed on WDES. The permittee requested this increase in TSS

based on the level of TSS in GCUA's effluent, the expected increase in concentration of TSS from the WDES cooling process and based on the fact that WDES contended that they were not going to add any additional loading of TSS to the Delaware River. The permittee shall also monitor for the daily maximum concentration.

The monitoring frequency of **once per month** is being carried forward from the existing permit. The sample type shall be **grab** and is in accordance with N.J.A.C. 7:14A-14.2.

4. Chemical Oxygen Demand (COD):

The existing monitoring and reporting requirement is carried forward in accordance with N.J.A.C. 7:14A-13.19. The permittee shall report for both monthly average and daily maximum for both concentration and loading.

The monitoring frequency of **once per month** is being carried forward from the existing permit. The sample type shall be **grab** and is in accordance with N.J.A.C. 7:14A-14.2.

5. Oil and Grease:

The effluent limitations are based on N.J.A.C. 7:14A-12.8(c) and are effluent concentration limitations of 10 mg/L as a monthly average and 15 mg/L as an instantaneous maximum.

The monitoring frequency of **once per month** is being carried forward from the existing permit. The sample type shall be **grab** and is in accordance with N.J.A.C. 7:14A-14.2.

6. Free Available Chlorine (FAC):

The facility pretreats its cooling water with chlorine; therefore, the effluent limitations and conditions for FAC are required in accordance with the Steam Electric ELGs at 40 CFR Part 423.15(10)(i). The daily maximum concentration limitation of 0.5 mg/L and the monthly average concentration limitation of 0.2 mg/L are being revised to be in accordance with the ELGs at 40 CFR 423.15(1)(i). The concentration limitations in the ELG were used to calculate loading limitations using the maximum cooling water flow of 2.6 MGD. These loadings were then back-calculated to derive concentrations limitations using the maximum combined total flow of 2.8 MGD and the conversion factor of 3.785. **This resulted in concentrations limitation of 0.19 mg/L as a monthly average and 0.47 mg/L as a daily maximum.**

A narrative condition has been included in Part IV to ensure that chlorination only occurs for a maximum of two hours per day consistent with 40 CFR Part 423.15(10)(ii).

The monitoring frequency of **once per month** is being carried forward from the existing permit. The sample type shall be **grab** and is in accordance with N.J.A.C. 7:14A-14.2.

7. Polychlorinated Biphenyls (PCBs):

The narrative requirement of no discharge of PCBs contained in Part IV is based on the Steam Electric ELGs at 40 CFR Part 423.15 (b)(2). The Steam Electric ELGs specifically state, "There shall be no discharge of PCB compounds such as those commonly used for transformer fluid."

8. Ammonia (Total as N):

In order to determine if the discharge from WDES causes a violation of the SWQS for ammonia, the Department had imposed a sampling requirement at the last permit renewal for ammonia on a quarterly basis to gather data for this parameter. Since this effluent is combined with the effluent from GCUA before being discharged to the Delaware River, the Department used the WDES and GCUA's data to determine what the final WQBELs for ammonia would be at GCUA's DSN 0004A outfall. Based on a cause analysis using this

data, no cause was shown to violate the acute ammonia criteria. Therefore, the existing monitor and report only requirement is being carried forward in this permit renewal so that the analysis can be redone at each permit renewal.

The existing monitoring frequency of **once per quarter** is being carried forward from the existing permit. The sample type shall be **Grab**.

9. Total Dissolved Solids (TDS):

The TDS limitation of 5,000 mg/L as a daily maximum for Adjusted Effluent is carried forward from the existing permit in accordance with N.J.A.C. 7:14A-13.19 and is based on the TDS mixing zone of 1,561 feet in length (844 feet upstream and 717 feet downstream) by 217 feet wide at GCUA's DSN 001A. This TDS mixing zone meets the requirement that the receiving stream's resultant TDS concentration is less than 133% of background, in accordance with the Effluent Quality Requirements of the DRBC Water Quality Regulations at Section 3.30.4.c. Monitoring is also required as a monthly average and daily maximum for Effluent Gross concentration and as a monthly average for Adjusted Effluent concentration.

In a modification issued by the Department on August 8, 2016, the Department adjusted the sample point for TDS from "Effluent Gross Value" to "Effluent Adjusted Value" to incorporate the ability for the permittee to subtract the concentration of Total Dissolved Solids (TDS) of GCUA's effluent (used as permittee's cooling water intake source) from the WDES TDS effluent concentrations at DSN 002A. This insures that the permittee is not responsible for the GCUA TDS concentrations when paying permit fees.

The monitoring frequency of **once per month** is being carried forward from the existing permit. The sample type shall be **grab** and is in accordance with N.J.A.C. 7:14A-14.2.

10. Foam:

The narrative foam permit condition is based on N.J.A.C. 7:14A-12.6.

11. Whole Effluent Toxicity (WET):

Section 101(a) of the CWA establishes a national policy of restoring and maintaining the chemical, physical and biological integrity of the Nation's waters. In addition, section 101(a)(3) of the CWA and the State's SWQS at N.J.A.C. 7:9B-1.5(a)4 state that the discharge of toxic pollutants in toxic amounts is prohibited. Further, 40 CFR 122.44(d) and N.J.A.C. 7:14A-13.6(a) require that where the Department determines using site-specific WET data that a discharge causes, shows a reasonable potential to cause, or contributes to an excursion above the SWQS, the permitting authority must establish effluent limits for WET. In order to satisfy the requirements of the CWA, the State's SWQS and the NJPDES Regulations, the need for a WQBEL for WET was evaluated for this discharge.

In order to determine the need for a WET WQBEL, the Department has analyzed all available WET effluent data. The existing permit included a requirement to perform two species characterization using *Ceriodaphnia dubia* and *Pimephales promelas* for both acute and chronic WET. For this facility, the data set consists of 11 data points for each set of species and tests during the time period of from October 2016 through June 2021. Based on the review of the applicable data set, the Department has concluded the following:

- Since sampling data for *Ceriodaphnia dubia* has shown that this species is more the more sensitive test species for this discharge, this renewal action will be removing the species of *Pimephales promelas* during this permit renewal for both acute and chronic WET.
- After review of the applicable data set, WET **was not** found in quantifiable amounts in the effluent for Acute WET using either species or for acute WET using *Pimephales promelas*. However, after review

of the applicable data set for Chronic WET using *Ceriodaphnia dubia*, WET was found in quantifiable amounts in the effluent. Conclusions are as follows:

- Given that the sampling data for *Ceriodaphnia dubia* has shown that this species is more sensitive test species for this discharge, this renewal action will be removing the species of *Pimephales promelas* during this permit renewal for both acute and chronic WET.
- However, acute and chronic monitoring and reporting requirements have been included in this permit action based on N.J.A.C. 7:14A-13.5(k)3 and the need to re-evaluate the necessity for WQBELs upon renewal of the permit (based on the recommendations of section 3.1 of the EPA TSD.
- Since the Department only regulates the acute criteria on the mainstem of the Delaware and no toxicity was shown by the Acute WET samples, a WQBEL has not been proposed in the draft permit at this time. However, consistent with the requirements of N.J.A.C. 7:14A-13.21(b)1, the minimum state standard acute toxicity action level of an $LC50 \geq 50\%$ effluent will be imposed in this permit action as an action level.

The test species method to be used for acute testing shall be the *Ceriodaphnia dubia*, Survival and Reproduction Test, 40 CFR 136.3, method 1002.0. Such selection is based on the freshwater characteristics of the receiving stream, the existing permit, N.J.A.C. 7:9B-1.5 and N.J.A.C. 7:18, the Regulations Governing the Certification of Laboratories and Environmental Measurements (N.J.A.C. 7:18).

Currently, the DRBC is developing a WLA for chronic toxicity. A report entitled "Wasteload Allocations for Volatile Organics and Chronic Toxicity for Point Sources Discharging to the Delaware Estuary" has been issued by the DRBC, but until the DRBC formally issues WLAs for this parameter, the Department has determined that a "monitor only" requirement in this permit for chronic WET will be carried forward from the existing permit. This information is required to be submitted pursuant to N.J.A.C. 7:14A-6.2(a)14 and N.J.A.C. 7:14A-13.5(1). Upon finalization of the above referenced DRBC report, the Department will determine whether a WQBEL for Chronic WET is necessary for the protection of water quality. If a WET limitation is deemed necessary, that limitation will be incorporated into the permit.

The test species method to be used for chronic testing shall be the *Ceriodaphnia dubia*, Survival and Reproduction Test, 40 CFR 136.3, method 1002.0. Such selection is based on the freshwater characteristics of the receiving stream, the existing permit, N.J.A.C. 7:9B-1.5 and the Department's "Chronic Toxicity Testing Specifications for Use in the NJPDES Permit Program" document. This document is included as Appendix A of this permit, in accordance with N.J.A.C. 7:14A-6.5, 11.2(a)2.iv. and 40 CFR Part 136.

Effluent samples for conducting WET testing are to be collected after the last treatment step, consistent with the collection location for all other parameters.

The WET tests for DSN 002A shall be conducted on the same day as the WET test taken at GCUA for DSN 001A and DSN 004A as detailed in Part IV Sections D.5.b and D.6.b.

The monitoring frequency for acute and chronic WET shall be **semi-annual** with a **composite** sample type.

13. Temperature:

In the May 8, 2013 DRBC docket, DRBC approved an increase in the daily maximum temperature limit of 30° C to 34° C based on recently performed thermal mixing zone modeling. Since the Department defers to DRBC for the determination of temperature effluent limitations in the mainstem Delaware River, this permit renewal is carrying forward the daily maximum temperature limit at 34° C. The permittee shall also monitor for the monthly average.

The monitoring frequency of **once per month** is being carried forward from the existing permit. The sample type shall be **grab** and is in accordance with N.J.A.C. 7:14A-14.2.

14. Toxic Pollutants:

The SWQS at N.J.A.C. 7:9B specify pollutant specific acute and chronic criteria for the protection of aquatic life and human health criteria for various toxic pollutants including Asbestos, and several Acids, Base/Neutrals, Metals, Pesticides, and Volatiles.

In accordance with N.J.A.C. 7:14A-13.6(a), a WQBEL shall be imposed when the Department determines pursuant to N.J.A.C. 7:14A-13.5 that the discharge of a pollutant causes an excursion above a SWQS.

In order to determine the need for toxic pollutant specific WQBELs, the Department has analyzed all effluent data sets made available to the Department. For this facility, this data set consists of semi-annual values (copper, selenium, 1,2 dichloroethylene, tetrachloroethylene and trichloroethylene) and 4 data values reported on the annual WCRs for the remaining priority pollutant. A pollutant is considered discharged in “quantifiable amounts” when an exact amount of that pollutant is measured equal to or above the detection level reported by a laboratory analysis in accordance with the sufficiently sensitive testing methods as detailed in Section D of this Fact Sheet and Part IV Section A of this permit. Based on the review of the data sets, the Department has concluded the following:

- At this time, insufficient data exist for all priority pollutants to determine the need for a WQBELs and only those parameters listed below were detected more than one time in 4 sampling events.

Antimony
Arsenic
Barium
Bis 2-Ethylheyl Phthalate
Bromoform
Chloroform
Chromium
Total Cyanide
Lead
Nickel
Zinc
Bromodichloromethane
Chlorodibromomethane

Acute criteria is not available for some of the parameters above at N.J.A.C. 7:9B-1.14(f) at this time. For those parameters with acute criteria, the detected values were below their respective criteria. Since the discharge is to the mainstem of the Delaware River and the Department only analyzes acute criteria for the mainstem of the Delaware, the Department did not compare the effluent data against the chronic or human health criteria.

Therefore, as authorized by N.J.A.C. 7:14A-13.5(l), the Department has included monitoring and reporting requirements for Base/Neutrals, Volatiles, Acids, Pesticides, Metals and Cyanide. The monitoring frequency for these parameters shall be retained at a frequency of **annual** with a **grab** sample type. A grab sample is appropriate as opposed to a composite sample based on the operations at the facility.

- Copper and Selenium were detected in all 10 samples as shown by the DMR data. Therefore, further analysis has been conducted on these parameters.

Quantified Pollutant Analysis Methodology:

For each pollutant discharged in quantifiable amounts in the effluent, a cause analysis was conducted using the procedures specified in the USEPA TSD in accordance with N.J.A.C. 7:14A-13.5. The cause analysis consists of a comparison between the pollutant's maximum effluent concentration value (or average value of a long-term data set in the case of criteria with an averaging period longer than one year) and the pollutant's applicable site specific WLA.

Using the steady state mass balance equation, WLAs were developed utilizing the applicable criteria, pollutant specific upstream concentrations (when available), and an acute dilution factor of 4.1 from the water quality study entitled, West Deptford Energy Station – Cormix Model Report, and prepared for West Deptford Energy, LLC by Weston Solutions, Inc. For Copper, the applied criteria is based on a default hardness value of 100 mg/L of and a default WER of 1.0.

For the applicable metals, default translators were utilized to convert total recoverable data to its dissolved equivalent for the cause analyses for aquatic criteria, and, if applicable, to convert the dissolved long-term averages to total recoverable values for determining WQBELs. Translator values for the parameters listed below, if not site specific, are based on the conversion factors for dissolved metals at 40 CFR Part 131 and N.J.A.C. 7:14A-13.6(c). The default metal translators used in the analyses are as follows:

Metal	Fresh Water		Saline Water	
	Translator (acute)	Translator (chronic)	Translator (acute)	Translator (chronic)
Copper	0.908	0.908	0.83	0.83
Selenium	N/A	N/A	0.998	0.998

Quantified Pollutant Analysis Results:

Cause analyses were conducted on **Total Recoverable Copper** and **Total Recoverable Selenium**. As a result of the cause analyses, neither parameter was found to cause an excursion of the SWQS. The Department's conclusions and results are listed below.

Effluent limitation analysis for the Toxic pollutants; effluent flow of 3.1 MGD and stream hardness of 100 mg/L.

Parameter	Data set time period	Number of data points	Coefficient of variation (CV)	Maximum reported data value (µg/L) (1) *	Calculated instream WLA (µg/L) *	"Cause" Y = yes N = no A > B ?	Aquatic criteria LTA (µg/L) **	Water Quality Based Limit, if applicable (µg/L) **
				A	B			
Total Recoverable Copper	10/2016 to 5/2021	(dt) = 10 (nd) = 0	0.42 (ca)	31.78 (max)	(a) = 52.11	(a) = N	(a) = 24.43	MDL = 57.39 AML = 38.71 NOT APPLICABLE
Total Recoverable Selenium	10/2016 to 5/2021	(dt) = 10 (nd) = 0	0.6 (d)	45 (max)	(a) = 82	(a) = N	(a) = 26.33	MDL = 82 AML = 49.92 NOT APPLICABLE

Footnotes and Abbreviations:

(dt) = data values detected.
(nd) = data values non-detected.
(d) = Default CV
(d3) = based on N.J.A.C. 7:14A-13.6(c)
(ca) = Calculated from data set
(sst) = site specific translator value
N/A = Not applicable

(a) = acute aquatic
(c) = chronic aquatic
(h) = human health non-carcinogen
(hc) = human health carcinogen
MR = Monitor and Report
EEQ = Existing Effluent Quality

(*) = Dissolved
(**) = Total Recoverable
LTA = Long Term Average
LTAeq = Long Term Average equivalent
WLA = Waste Load Allocation
MDL = Maximum Daily Limit
AML = Average Monthly Limit

- Since the discharge of **Total Recoverable Selenium** and **Total Recoverable Copper** in the permittee's effluent **was not found** to cause an excursion of the SWQS, no WQBELs are proposed in the draft permit for these parameters. The existing monitoring requirement is being carried forward from the existing permit.

WQBEL Derivation Procedures (non 303(d) listed pollutants):

Consistent with N.J.A.C. 7:14A-13.6(a), the WQBELs were calculated using the procedures set forth in the USEPA TSD. Consistent with the recommendations set forth in the USEPA TSD (Section 5.5.2), the Department utilized a default CV of 0.6 for the analysis for Total Recoverable Selenium.

For aquatic criteria based calculations (i.e. acute and chronic), LTA values are developed from the WLAs using the 99th percentile multipliers calculated using the equations set forth in Table 5-1 of the USEPA TSD. The more stringent LTA value was then utilized in calculating the MDL(s) and AML(s). For human health criteria based calculations (carcinogenic and non-carcinogenic), the AML is set equal to the WLA consistent with the recommendations of Section 5.4.4 of the USEPA TSD. The MDL is developed from the AML utilizing a MDL-to-AML multiplier calculated in accordance with the equations set forth in Table 5-3 of the USEPA TSD based on a 99th percentile exceedance probability for the MDL and AML. The more stringent MDL/AML combination resulting from a comparison between the aquatic and human health results is established as the applicable WQBEL. In accordance with N.J.A.C. 7:14-A-13.14(a)2, effluent limitations are expressed as concentration and mass loading. The limitations for the metal parameters are expressed in the total recoverable form in accordance with 40 CFR 122.45(c).

For continuous discharges, N.J.A.C. 7:14A-13.15(a)3 states, "limitations on any pollutant or pollutant parameter where the monitoring frequency is once per month or less may be stated as a maximum daily limitation". The USEPA commented on this NJPDES regulation via a memo dated September 16, 2010 from Barbara A. Finazzo, Director, Division of Environmental Planning and Protection, USEPA-Region 2 to John Plonski, Assistant Commissioner for Water Resources Management, NJDEP.

USEPA noted in the memo that to ensure consistency with the federal regulations, New Jersey must establish permit limitations to provide both short-term and long-term controls to ensure SWQS are met. Therefore, in situations where the monitoring frequency is once per month or less, as required by USEPA and consistent with Section 5.5.3 of the USEPA TSD, the statistical procedure is employed using n (number of samples) = 4 to derive the AML for acute, chronic WQBEL calculations ($n=1$ will continue to be utilized for human health WQBEL calculations).

The monitoring frequency for **Total Recoverable Selenium** and **Total Recoverable Copper** of **semi-annual** is being carried forward from the existing permit. The sample type shall be **Grab**.

Consistent with the intent of 40 CFR 122.45(c) and N.J.A.C. 7:14A-13.14(b), monitoring data for toxic metals (excluding Hexavalent Chromium) shall be expressed as total recoverable. As authorized by N.J.A.C. 7:14A-13.14(b)3, the monitoring data for Hexavalent Chromium shall be expressed as dissolved.

The DRBC is developing WLAs for 1,2 dichloroethane, tetrachloroethylene, and trichloroethylene. Monitoring only on a **semi-annual** basis for these three volatile organic compounds, 1,2 dichloroethane, tetrachloroethylene, and trichloroethylene is included in the permit.

Please refer to the "NJPDES Monitoring Report Form Reference Manual, available on the Department's website at http://www.state.nj.us/dep/dwq/pdf/MRF_Manual.pdf for further information regarding reporting.

The existing permit requires annual monitoring for Hexavalent Chromium, Total Phenols. The Department has eliminated the monitoring requirement for these parameters because:

1. Hexavalent Chromium is eliminated because TR Chromium was not detected. The annual monitoring for Total Chromium will be carried forward from the existing permit.
2. There are no SWQS for Phenols.

**DSN003A, DSN 004A, DSN 005A, DSN 006A – Low Volume Wastewater
(Unit 1 and 2 Blowdown/ Evaporative Cooler Blowdown, Service Water/Floor Drains/Oil & Water
Separator, Reverse Osmosis Blowdown)**

1. Flow:

This permit does not include a numerical limitation for flow. Monitoring conditions are applied pursuant to N.J.A.C. 7:14A-13.13.

The monitoring frequency shall be **continuous** with a **metered** sample type

2. pH:

The Steam Electric ELGs of 6.0 s.u. as a minimum and 9.0 s.u. as a maximum are consistent with the Effluent Quality Requirements of the DRBC Water Quality Regulations, Section 4.30.5. These limitations are being carried forward from the existing permit in accordance with N.J.A.C. 7:14A-13.19.

The monitoring frequency **once per month** is being carried forward from the existing permit. The sample type shall be **grab** and is in accordance with N.J.A.C. 7:14A-14.2.

3. Polychlorinated Biphenyls (PCBs):

The narrative requirement of no discharge of PCBs contained in Part IV is based on the Steam Electric ELGs at 40 CFR 423.15 (a)(2). The Steam Electric ELGs specifically state, "There shall be no discharge of PCB compounds such as those commonly used for transformer fluid."

4. TSS:

The concentration limitations of 30 mg/L as a monthly average and 100 mg/L as a daily maximum are based on the Steam Electric ELGs at 40 CFR Part 423.15(a)(3). Monthly average monitoring and reporting is also required.

The monitoring frequency of **once per month** is being carried forward from the existing permit. The sample type shall be **grab** and is in accordance with N.J.A.C. 7:14A-14.2.

5. Oil and Grease:

The effluent concentration limitations of 10 mg/L as a monthly average and 15 mg/L as an instantaneous maximum are being revised to a monthly average of 15 mg/L and an instantaneous maximum of 20 mg/L to be consistent with the low volume waste sources section of the Steam Electric ELGs found at 40 CFR 423.15(a)(3).

The monitoring frequency of **once per month** is being carried forward from the existing permit. The sample type shall be **grab** and is in accordance with N.J.A.C. 7:14A-14.2.

D. Use of Sufficiently Sensitive Test Methods for Reporting:

When more than one test procedure is approved under this part for the analysis of a pollutant or pollutant parameter, the test procedure must be sufficiently sensitive as defined at 40 CFR 136, 122.21(e)(3), and 122.44(i)(1)(iv).

An EPA-approved method is sufficiently sensitive where:

- A. The method minimum level is at or below the level of the applicable water quality criterion or permit limitation for the measured pollutant or pollutant parameter; or
- B. The method minimum level is above the applicable water quality criterion, but the amount of the pollutant or pollutant parameter in a facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
- C. The method has the lowest minimum level of the EPA-approved analytical methods.

When there is no analytical method that has been approved under 40 CFR part 136, required under 40 CFR chapter I, subchapter N or O, and is not otherwise required by the Department, the permittee may use any suitable method upon approval by the Department.

For questions regarding the applicability of the rule and whether or not the facility is complying with the target level of sensitivity, contact Stephen Seeberger of the Bureau of Surface Water & Pretreatment Permitting at (609) 292-4860 or via email at Stephen.Seeberger@dep.nj.gov.

For questions regarding laboratory methodologies, certifications, or specifics relating to quantitation limits associated with individual test methods, contact Ryan Larum of the Office of Quality Assurance at (609) 292-3950 or via email at Ryan.Larum@dep.nj.gov.

E. Reporting Requirements:

All data requested to be submitted by this permit shall be reported on the MRFs as appropriate and submitted to the Department as required by N.J.A.C. 7:14A-6.8(a).

Electronic Reporting Requirements

On October 22, 2015, the USEPA promulgated the final NPDES Electronic Reporting Rule (see Federal Register 80:204 p. 64064). This rule requires entities regulated under the CWA NPDES program to report certain information electronically instead of filing paper reports.

In accordance with this rule, all required monitoring results reported on MRFs shall be electronically submitted to the Department via the Department's Electronic MRF Submission Service

Consistent with the provisions of the final rule, the permittee may seek a waiver from the mandatory electronic reporting of the above identified documents and reports for just cause. Such a request shall be made in accordance with the provisions of 40 CFR 127.15 and submitted to the Department at the address identified below:

NJDEP: Division of Water Quality
Mail Code 401-02B
Bureau of Groundwater, Residuals, and Permit Administration
P.O. Box 420
401 E. State Street
Trenton, NJ 08625-0420

F. General Conditions:

In accordance with N.J.A.C. 7:14A-2.3 and 6.1(b), specific rules from the New Jersey Administrative Code have been incorporated either expressly or by reference in Part I and Part II.

G. Operator Classification Number:

The operator classification requirement is no longer included in the permit. To obtain or determine the appropriate licensed operator classification for the treatment works specified, the permittee shall contact the Bureau of Environmental, Engineering and Permitting at (609) 984-4429.

H. Flow Related Conditions:

The numerical value used for flow as a permit condition is consistent with GCUA Consolidated Area WMP and the Tri-County Water Quality Management Plan.

I. Residuals/Sludge Conditions:

Industrial facilities which have a wastewater pretreatment system that discharges to and is permitted by a delegated local agency, and which generates a sludge as part of that treatment system, are required to sample, analyze, and maintain records on file on-site, but are not required to report information on process wastewater sludge removed for use or disposal, except as provided under N.J.A.C. 7:14C-1.9(e) and (f). Part II residuals conditions remain in the permit to ensure proper management of sludge generated from the inclined plate settler and oil/water separator prior to wastewater discharge to the GCUA. Monitored Location SI6A SQAR-Plate Settler and the associated MRFs have been removed from the draft permit renewal. Please contact Patrick R. Brown of the Bureau of Ground Water, Residuals, and Permit Administration at (609) 984-4428 or via email to Pat.Brown@dep.nj.gov (preferred) with any questions you may have.

All treatment works with a discharge regulated under N.J.A.C. 7:14A must have permits that implement applicable technical standards for residuals management. Generally, the permit issued to the treatment works generating the residual will include applicable residual quality monitoring as well as other general conditions required by N.J.A.C. 7:14A-6. In addition, the permit may include conditions related to any aspect of residual management developed on a case-by-case basis where the Department determines that such conditions are necessary to protect public health and the environment.

The permit may also include conditions establishing requirements for treatment works that send residual to other facilities for final use or disposal. Thus, **ALL** residual preparers (that is, generators as well as persons who manage the residual) are required to submit basic information concerning their residual use and disposal practices. This basic information is submitted by compliance with the Sludge Quality Assurance Regulations (N.J.A.C. 7:14C).

The documents listed below have been used to establish the residual conditions of the Draft Permit:

- a. United States Environmental Protection Agency "Standards for the use or disposal of sewage sludge" (40 CFR Part 503),
- b. "New Jersey Pollutant Discharge Elimination System" (N.J.A.C. 7:14A),
- c. Technical Manual for Residuals Management, May 1998,
- d. USEPA Part 503 Implementation Guidance, EPA 833-R-95-001, October 1995. This document is a compilation of federal requirements, management practices and EPA recommended permit conditions for sewage sludge use and management practices,
- e. USEPA A Plain English Guide to the EPA Part 503 Biosolids Rule, EPA/832/R-93/003, September 1994,
- f. New Jersey "Statewide Sludge Management Plan", January 2006 and
- g. New Jersey "Sludge Quality Assurance Regulations" (SQAR), N.J.A.C. 7:14C.

J. Biocides or Other Cooling Water Additives:

The Department has approved the permittee's request to use the following corrosion inhibitors, biocides, or other cooling water additives in the respective systems:

- Non-Contact Cooling Water

ChemTreat RL124 (Sodium Bisulfite)
Caustic Soda Liquid 50% (Sodium Hydroxide)
25% Caustic Soda Liquid (Sodium Hypochlorite)
Sulfuric Acid 66 BE (Sulfuric Acid)

- Pretreatment of the GCUA Treated Effluent

Caustic (Sodium Hydroxide), and Sodium Hypochlorite.

- Ultrafiltration

P8281L, CL5695 Citric Acid 50%,

- Reverse Osmosis

RL9004, RL124, CL206, and RL1302, Ferric Chloride.

- Heat Recovery Steam Generator (HRSG)/Auxiliary Boiler

BL1794, Ammonia, BL1260, BL-8301, and BL152.

- Cooling Tower

FO-182, CL5437, Sulfuric Acid, Foam Blast, and Sodium Hypochlorite.

- Closed Cooling System

DowFrost HD (inhibited propylene glycol)
DowFrost HTF (supplemental copper corrosion inhibitor)

- For the Inclined Plate Settler:

P828L (ferric sulfate)
P850L (anionic polymer)

The permit renewal application notes that the following approved additives are no longer utilized at the facility and are therefore being removed from the permit:

- Sodium permanganate, P813-E, P12A, RL1500, RL2016, RL5000, Polyaluminum Chloride, FO-322, F-680, CL240, Purate, FO-140, FO-185, Aluminum Potassium Sulfate (Sulfuric Acid, Aluminum Potassium Salt), and Aqua Ammonia (Ammonium Hydroxide).

If the permittee decides to begin using any additional additives in the future that contain active ingredients equivalent to the above listed additives, the permittee shall only be required to notify the Bureau of Surface Water Permitting prior to its use. This notification shall consist of all relevant information, including Material Safety Data Sheets and applicable aquatic toxicity data. However, if the permittee decides to begin using any additional additives that are chemically different from the above listed, the permittee shall notify this Bureau at least 180 days

prior to use so that the permit may be reopened to incorporate any additional limitations and/or monitoring requirements deemed necessary.

K. Delaware River Basin PCB Monitoring and Pollutant Minimization Plan:

This existing permit required sampling of the 209 PCB congeners utilizing USEPA Method 1668A on an annual basis coincident with GCUA PCB monitoring. The purpose of this monitoring was to determine whether this facility should be subjected to the Delaware River PCB TMDL requirements. Given that this is a new facility with no known or potential PCB sources, it was expected that any PCBs present in the effluent would have originated from the source water, namely the treated GCUA effluent. Data collected during the existing permit cycle are variable, but the average PCB levels observed in the West Deptford Energy effluent are nearly identical to the GCUA effluent that is used for source water. The Department and DRBC have therefore concluded that West Deptford Energy is not an independent PCB source and should not be subjected to PCB TMDL requirements. The Department has removed the annual dry weather sampling requirements from Part IV of the permit and no PMP requirement will be required for this facility.

L. Standard DRBC Findings:

At the request of the DRBC in an email from David Kovach dated June 29, 2015, the following statements are incorporated into this fact sheet for informational purposes:

- This permit does not conflict with the Delaware River Basin Commission Comprehensive Plan and is designed to prevent substantial adverse impact on the environment related to water resources, while sustaining the current and future water use and development of the water resources of the Delaware River Basin.
- The effluent limitations in this NJPDES Permit conform to the Delaware River Basin Commission effluent quality requirements, where applicable.
- This permit is written to produce a discharge meeting the effluent requirements as set forth in the Delaware River Basin Commission's Water Quality Regulations 18 CFR Part 410.

7 Variances to Permit Conditions:

To date, the Department has not received a variance request from the permittee.

Procedures for modifying a WQBEL are found in the SWQS, N.J.A.C. 7:9B-1.8 and 1.9. If a WQBEL has been proposed in this permit action, the permittee may request a modification of that limitation in accordance with N.J.A.C. 7:14A-11.7(a). This request must be made prior to the close of the public comment period. The information that must be submitted to support the request may be obtained from the Bureau of Environmental Analysis, Restoration and Standards at (609) 633-1441.

8 Description of Procedures for Reaching a Final Decision on the Draft Action:

Please refer to the procedures described in the public notice that is part of the draft permit. The public notice for this permit action is published in the *South County Times* and in the DEP Bulletin.

9 Contact Information

If you have any questions regarding this permit action, please contact Robert Hall, Bureau of Surface Water & Pretreatment Permitting at (609) 292-4860.

10 Calculation Equations:

A. Steady State Mass Balance Equation: $C_d = C_i = (Q_{up} \times C_{up} + Q_w \times WLA) / (Q_{up} + Q_w)$

where, C_d = downstream concentration
 C_i = instream surface water criteria (from N.J.A.C. 7:9B)
 C_{up} = upstream concentration
 Q_{up} = upstream design low flow value, cfs
 Q_w = wastewater flow, cfs
 WLA = wasteload allocation

B. Wasteload Allocation: $WLA = C_i \times Df - C_{up}(Df - 1)$

where, WLA = wasteload allocation
 C_i = instream surface water criteria (from N.J.A.C. 7:9B)
 C_{up} = upstream concentration
 Df = dilution factor

C. Long Term Average: $LTA = (WLA) \times [WLA \text{ multiplier (LTA)}]$

where, LTA = long term average
 WLA = wasteload allocation
 $WLA \text{ multiplier (LTA)}$ = wasteload allocation multiplier for long term average, the 99th percentile multiplier, (see Table 5-1 in USEPA TSD, page 102)

D. Maximum Daily Limitation: $MDL = (LTA) \times [LTA \text{ multiplier (MDL)}]$

where, MDL = maximum daily limitation
 LTA = long term average
 $LTA \text{ multiplier (MDL)}$ = long term average multiplier for the maximum daily limitation, the 99th percentile multiplier, (see Table 5-2 in USEPA TSD, page 103)

E. Average Monthly Limitation: $AML = (LTA) \times [LTA \text{ multiplier (AML)}]$

where, AML = average monthly limitation
 LTA = long term average
 $LTA \text{ multiplier (AML)}$ = long term average multiplier for the average monthly limitation, the 99th percentile multiplier, (see Table 5-2 in USEPA TSD, page 103)

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Permit Summary Table

Unless otherwise noted, all effluent limitations are expressed as maximums. Dashes (--) indicate there is no effluent data, no limitations, or no monitoring for this parameter depending on the column in which it appears.

DSN 002A – NCCW and Low Volume Wastewater

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2016 – 5/2021	EXISTING LIMITS	FINAL LIMITS
Flow	MGD	Monthly Avg. Daily Max.	1.45 3.31	MR MR	MR MR
Effluent pH	su	Daily Min. Daily Max.	6.12 8.03	6.0 9.0	6.0 9.0
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Det. / # N.D.	11.53 44 52/3	60 MR	60 MR
Total Dissolved Solids (TDS) Effluent Gross Value	mg/L	Monthly Avg. Daily Max.	2172.09 3590	MR MR	MR MR
Total Dissolved Solids (TDS) Effluent Adjusted Value	mg/L	Monthly Avg. Daily Max.	1626.77 3028	MR 5,000	MR 5,000
Ammonia, Total (as N)	mg/L	Monthly Avg. Daily Max. # Det. / # N.D.	0.42 1.3 16/5	MR MR	MR MR
Chemical Oxygen Demand (COD)	kg/day	Monthly Avg. Daily Max.	586.26 1204	MR MR	MR MR
Chemical Oxygen Demand (COD)	mg/L	Monthly Avg. Daily Max.	114.84 215	MR MR	MR MR
Oil and Grease	mg/L	Monthly Avg. Instant Max. # Det. / # N.D.	1.97 5.4 29/26	10 15	10 15
Effluent Temperature	°C	Monthly Avg. Daily Max.	21.045 31.8	MR 34	MR 34
Free Available Chlorine	mg/L	Monthly Avg. Daily Max. # Det. / # N.D.	0.10 0.25 53/3	0.2 0.5	0.19 0.47
Total Recoverable Copper	µg/L	Monthly Avg. Daily Max. # Det. / # N.D.	19.04 35 10/0	MR MR	MR MR
Total Recoverable Selenium	µg/L	Monthly Avg. Daily Max. # Det. / # N.D.	36.62 89 10/0	MR MR	MR MR
1,2-Dichloroethane	µg/L	Monthly Avg. Daily Max. # Det. / # N.D.	<0.12 - <0.32 <0.12 - <0.32 0/8	MR MR	MR MR
Tetrachloroethylene	µg/L	Monthly Avg. Daily Max. # Det. / # N.D.	<0.23 - <0.35 <0.23 - <0.35 0/8	MR MR	MR MR
Trichloroethylene	µg/L	Monthly Avg. Daily Max. # Det. / # N.D.	<0.15 - <0.30 <0.15 - <0.30 0/8	MR MR	MR MR
Acute Toxicity, LC50 (<i>Pimephales promelas</i>)	%	Minimum	>100 (9 samples)	MR	--
Acute Toxicity, LC50 (<i>Ceriodaphnia dubia</i>)	%	Minimum	>100 (9 samples)	MR	MR (1)
Chronic Toxicity, IC25 (<i>Pimephales promelas</i>)	%	Minimum	>100 (9 samples)	MR	--

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2016 – 5/2021	EXISTING LIMITS	FINAL LIMITS
Chronic Toxicity, IC25 (<i>Ceriodaphnia dubia</i>)	%	Minimum	28.58 (avg. of 8 samples) >100 (1 sample)	MR	MR

(1) The permittee shall meet the Acute WET Action Level of LC50 \geq 50%.

DSN 003A – Unit 1 Blowdown/ Evaporative Cooler Blowdown

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2016 – 5/2021	EXISTING LIMITS	FINAL LIMITS
Flow	MGD	Monthly Avg. Daily Max.	0.054 0.11	MR MR	MR MR
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Det. / # N.D.	8.33 20 27/29	30 100	30 100
Oil and Grease	mg/L	Monthly Avg. Instant Max. # Det. / # N.D.	2.35 10.7 24/32	10 15	15 20
Effluent pH	su	Daily Min. Daily Max.	6.47 8.99	6.0 9.0	6.0 9.0

DSN 004A – Unit 2 Blowdown/ Evaporative Cooler Blowdown

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2016 – 5/2021	EXISTING LIMITS	FINAL LIMITS
Flow	MGD	Monthly Avg. Daily Max.	0.04 0.15	MR MR	MR MR
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Det. / # N.D.	8.77 19 13/43	30 100	30 100
Oil and Grease	mg/L	Monthly Avg. Instant Max. # Det. / # N.D.	1.93 3.8 20/36	10 15	15 20
Effluent pH	su	Daily Min. Daily Max.	6.32 9.17	6.0 9.0	6.0 9.0

DSN 005A – Low Volume Wastewater – Service Water/Floor Drains/Oil & Water Separator

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2016 – 5/2021	EXISTING LIMITS	FINAL LIMITS
Flow	MGD	Monthly Avg. Daily Max.	0.006 0.05	MR MR	MR MR
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max.	11.55 53 21/35	30 100	30 100
Oil and Grease	mg/L	Monthly Avg. Instant Max. # Det. / # N.D.	3.01 13.9 27/27	10 15	15 20
Effluent pH	su	Daily Min. Daily Max.	6.67 9.7	6.0 9.0	6.0 9.0

DSN 006A – Low Volume Wastewater – Reverse Osmosis Blowdown

PARAMETER	UNITS	AVERAGING PERIOD	WASTEWATER DATA 10/2016 – 5/2021	EXISTING LIMITS	FINAL LIMITS
Flow	MGD	Monthly Avg. Daily Max.	0.046 0.86	MR MR	MR MR
Total Suspended Solids (TSS)	mg/L	Monthly Avg. Daily Max. # Det. / # N.D.	7.06 13 17/39	30 100	30 100
Oil and Grease	mg/L	Monthly Avg. Instant Max. # Det. / # N.D.	1.83 3.5 22/34	10 15	15 20
Effluent pH	su	Daily Min. Daily Max.	7.33 8.31	6.0 9.0	6.0 9.0

Footnotes and Abbreviations:

MR Monitor and report only

The following items are used to establish the basis of the Draft Permit:

Rules and Regulations:

1. 33 U.S.C. 1251 et seq., Federal Water Pollution Control Act. [B]
2. 40 CFR Part 131, Federal Water Quality Standards. [B]
3. 40 CFR Part 122, National Pollutant Discharge Elimination System. [B]
4. N.J.S.A. 58:10A-1 et seq., New Jersey Water Pollution Control Act. [A]
5. N.J.A.C. 7:14A-1 et seq., NJPDES Regulations. [A]
6. N.J.A.C. 7:9B-1 et seq., New Jersey SWQS. [A]
7. N.J.A.C. 7:15, Statewide Water Quality Management Planning Rules. [A]
8. N.J.A.C. 7:14C, Sludge Quality Assurance Regulations. [A]
9. DRBC: Administrative Manual – Part III Water Quality Regulations.
10. Pretreatment Program Requirements for Local Agencies (N.J.A.C. 7:14A-19).

Guidance Documents / Reports:

1. "Field Sampling Procedures Manual", published by the Department. [A]
2. "NJPDES Monitoring Report Form Reference Manual", updated December 2007, and available on the web at http://www.state.nj.us/dep/dwq/pdf/MRF_Manual.pdf. [A]
3. "USEPA TSD for Water Quality-based Toxics Control", EPA/505/2-90-001, March 1991. [B]
4. New Jersey's 2016 Integrated Water Quality Monitoring and Assessment Report (includes 305 (b) Report 303(d) List). [A]
5. Draft "Technical Manual for RWBR", published by the Department, January 2005. [A]

Permits / Applications:

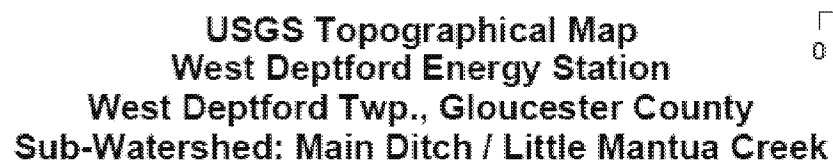
1. NJPDES/DSW Permit Application dated March 25, 2021 and received
2. Existing Draft NJPDES/DSW Permit NJ0171905, issued May 3, 2016.
3. Existing Final NJPDES/DSW Permit NJ0171905, issued August 1, 2016 and effective October 1, 2016.
4. Minor Modification to NJPDES/DSW Permit NJ0171905, issued April 22, 2016, and effective on October 1, 2016 to adjust the calculation for reporting effluent concentrations of TDS.
5. Minor Modification to NJPDES/DSW Permit NJ0171905, issued August 22, 2016 and effective on October 1, 2016 to correct a typographical error in Part III for COD.

Other:

1. Water Quality Based Effluent Limitation and End-Of-Pipe Limitation Analysis Calculation Sheets.
2. Whole Effluent Toxicity (WET) Calculation Sheets.
3. DRBC Docket No. D-2008-027 CP-4.
4. DRBC Docket No. OP-2008-027 CP-3.

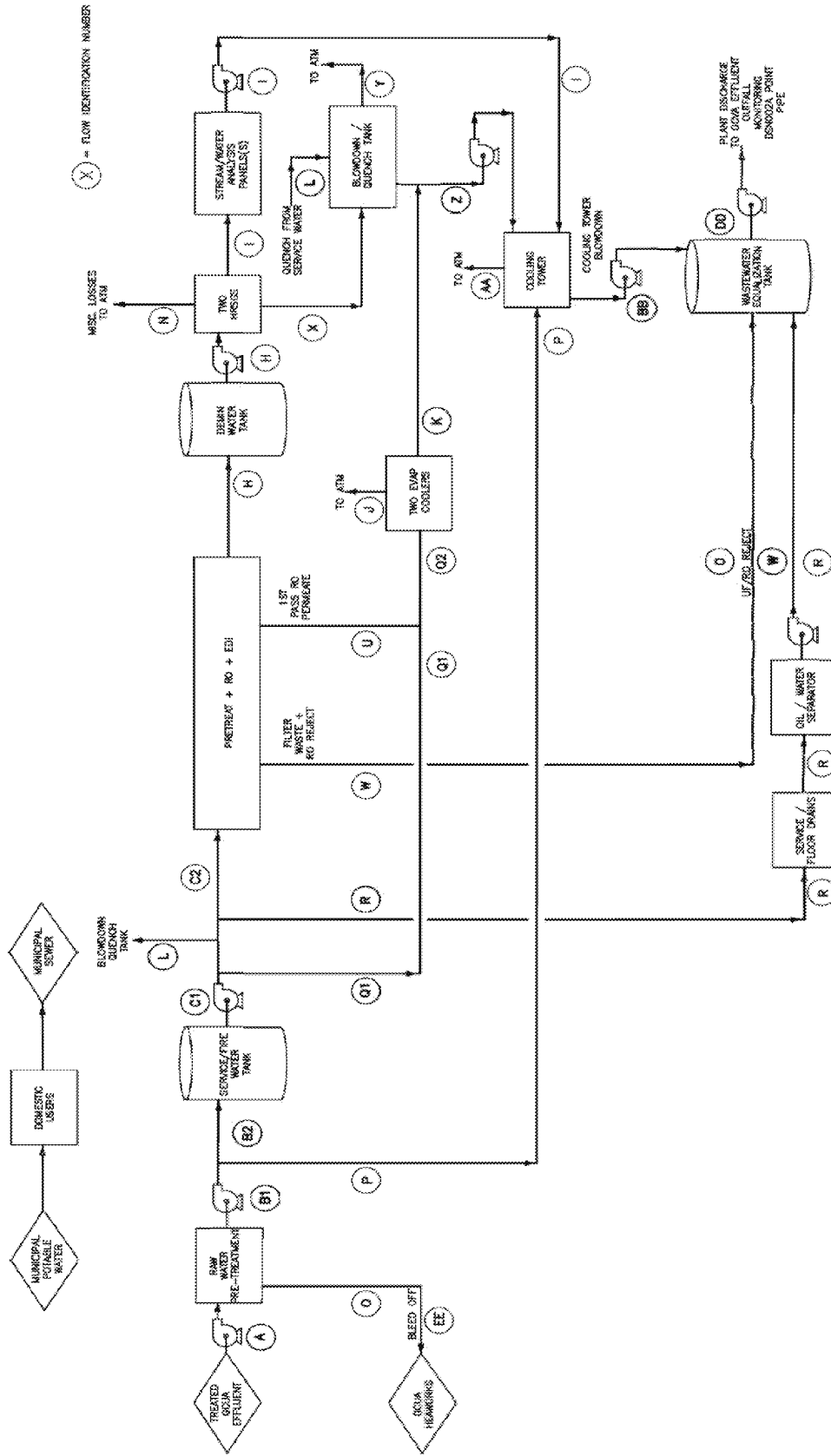
Footnotes:

- [A] Denotes items that may be found on the Department's website located at "<http://www.state.nj.us/dep/>".
- [B] Denotes items that may be found on the USEPA website at "<http://www.epa.gov/>".



Gloucester County UA

0	0.275	0.55	1.1 Miles
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SEE FIGURE 3B FOR ASSOCIATED FLOWS

NOTE: FIGURE BASED ON CH2M HILL ENGINEERS, INC PROCESS DIAGRAM WATER BALANCE SHEET 1 DWG. NO. M-WB01 REV. C

FIGURE #

3A

WEST DEPTFORD ENERGY STATION
3 PARADISE ROAD
TOWNSHIP OF WEST DEPTFORD
GLOUCESTER COUNTY, NEW JERSEY 08066

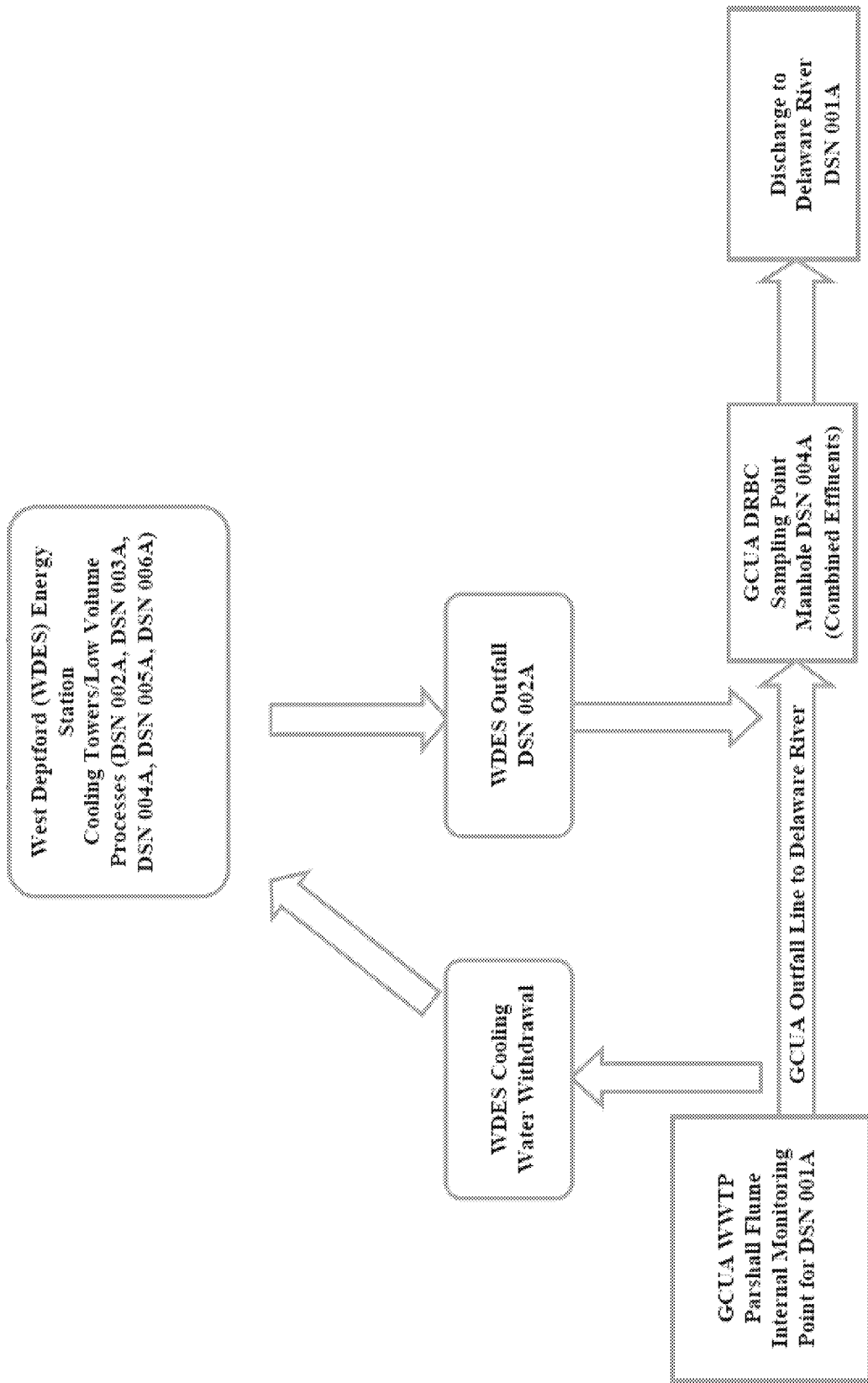
PROCESS FLOW DIAGRAM

NOT TO SCALE



DRAWN BY: KIN REVISION DATE: 3/3/2021

Wastewater Effluent Reuse by West Deptford Energy Station (NJ00171905) from Gloucester County MUA





NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM

The New Jersey Department of Environmental Protection hereby grants you a NJPDES permit for the facility/activity named in this document. This permit is the regulatory mechanism used by the Department to help ensure your discharge will not harm the environment. By complying with the terms and conditions specified, you are assuming an important role in protecting New Jersey's valuable water resources. Your acceptance of this permit is an agreement to conform with all of its provisions when constructing, installing, modifying, or operating any facility for the collection, treatment, or discharge of pollutants to waters of the state. If you have any questions about this document, please feel free to contact the Department representative listed in the permit cover letter. Your cooperation in helping us protect and safeguard our state's environment is appreciated.

Permit Number: NJ0171905

Draft: Surface Water Renewal Permit Action

Permittee:

West Deptford Energy LLC
3 Paradise Road
West Deptford Twp, NJ 08066

Co-Permittee:

Property Owner:

West Deptford Energy LLC
3 Paradise Road
West Deptford Twp, NJ 08066

Location Of Activity:

West Deptford Energy LLC
3 Paradise Road
West Deptford Twp, Gloucester County

Authorization(s) Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
B - Industrial Wastewater - Renewal			

By Authority of:
Commissioner's Office

DEP AUTHORIZATION
Susan Rosenwinkel, Bureau Chief
Bureau of Surface Water & Pretreatment Permitting

(Terms, conditions and provisions attached hereto)

PART I GENERAL REQUIREMENTS: NJPDES

A. General Requirements of all NJPDES Permits

1. Requirements Incorporated by Reference

- a. The permittee shall comply with all conditions set forth in this permit and with all the applicable requirements incorporated into this permit by reference. The permittee is required to comply with the regulations, including those cited in paragraphs b. through e. following, which are in effect as of the effective date of the final permit.
- b. General Conditions
 - Penalties for Violations N.J.A.C. 7:14-8.1 et seq.
 - Incorporation by Reference N.J.A.C. 7:14A-2.3
 - Toxic Pollutants N.J.A.C. 7:14A-6.2(a)4i
 - Duty to Comply N.J.A.C. 7:14A-6.2(a)1 & 4
 - Duty to Mitigate N.J.A.C. 7:14A-6.2(a)5 & 11
 - Inspection and Entry N.J.A.C. 7:14A-2.11(e)
 - Enforcement Action N.J.A.C. 7:14A-2.9
 - Duty to Reapply N.J.A.C. 7:14A-4.2(e)3
 - Signatory Requirements for Applications and Reports N.J.A.C. 7:14A-4.9
 - Effect of Permit/Other Laws N.J.A.C. 7:14A-6.2(a)6 & 7 & 2.9(c)
 - Severability N.J.A.C. 7:14A-2.2
 - Administrative Continuation of Permits N.J.A.C. 7:14A-2.8
 - Permit Actions N.J.A.C. 7:14A-2.7(c)
 - Reopener Clause N.J.A.C. 7:14A-6.2(a)10
 - Permit Duration and Renewal N.J.A.C. 7:14A-2.7(a) & (b)
 - Consolidation of Permit Process N.J.A.C. 7:14A-15.5
 - Confidentiality N.J.A.C. 7:14A-18.2 & 2.11(g)
 - Fee Schedule N.J.A.C. 7:14A-3.1
 - Treatment Works Approval N.J.A.C. 7:14A-22 & 23
- c. Operation And Maintenance
 - Need to Halt or Reduce not a Defense N.J.A.C. 7:14A-2.9(b)
 - Proper Operation and Maintenance N.J.A.C. 7:14A-6.12
- d. Monitoring And Records
 - Monitoring N.J.A.C. 7:14A-6.5
 - Recordkeeping N.J.A.C. 7:14A-6.6
 - Signatory Requirements for Monitoring Reports N.J.A.C. 7:14A-6.9
- e. Reporting Requirements
 - Planned Changes N.J.A.C. 7:14A-6.7
 - Reporting of Monitoring Results N.J.A.C. 7:14A-6.8
 - Noncompliance Reporting
 - N.J.A.C. 7:14A-6.10 & 6.8(h)
 - Hotline/Two Hour & Twenty-four Hour Reporting N.J.A.C. 7:14A-6.10(c) & (d)
 - Written Reporting N.J.A.C. 7:14A-6.10(e) & (f) & 6.8(h)
 - Duty to Provide Information N.J.A.C. 7:14A-2.11, 6.2(a)14 & 18.1
 - Schedules of Compliance N.J.A.C. 7:14A-6.4
 - Transfer N.J.A.C. 7:14A-6.2(a)8 & 16.2

PART II

GENERAL REQUIREMENTS: DISCHARGE CATEGORIES

A. Additional Requirements Incorporated By Reference

1. Requirements for Discharges to Surface Waters

- a. In addition to conditions in Part I of this permit, the conditions in this section are applicable to activities at the permitted location and are incorporated by reference. The permittee is required to comply with the regulations which are in effect as of the effective date of the final permit.
 - i. Surface Water Quality Standards N.J.A.C. 7:9B-1
 - ii. Water Quality Management Planning Regulations N.J.A.C. 7:15

B. General Conditions

1. Scope

- a. The issuance of this permit shall not be considered as a waiver of any applicable federal, state, and local rules, regulations and ordinances.

2. Permit Renewal Requirement

- a. Permit conditions remain in effect and enforceable until and unless the permit is modified, renewed or revoked by the Department.
- b. Submit a complete permit renewal application 180 days before the expiration date.

3. Notification of Non-Compliance

- a. The permittee shall notify the Department of all non-compliance when required in accordance with N.J.A.C. 7:14A-6.10 by contacting the DEP HOTLINE at 1-877-WARNDEP (1-877-927-6337).
- b. The permittee shall submit a written report as required by N.J.A.C. 7:14A-6.10 within five days.

4. Notification of Changes

- a. The permittee shall give written notification to the Department of any planned physical or operational alterations or additions to the permitted facility when the alteration is expected to result in a significant change in the permittee's discharge and/or residuals use or disposal practices including the cessation of discharge in accordance with N.J.A.C. 7:14A-6.7.
- b. Prior to any change in ownership, the current permittee shall comply with the requirements of N.J.A.C. 7:14A-16.2, pertaining to the notification of change in ownership.

5. Access to Information

- a. The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to enter upon a person's premises, for purposes of inspection, and to access / copy any records that must be kept under the conditions of this permit.

6. Standard Reporting Requirements – Monitoring Report Forms (MRFs)

- a. All MRFs shall be electronically submitted to the Department's MRF Submission Service.
- b. MRF data submission shall be in accordance with the guidelines and provisions outlined in the Department's Electronic Data Interchange (EDI) agreement with the permittee.
- c. MRFs shall be submitted at the frequencies identified in Part III of this permit.
- d. All MRFs shall be certified by the highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility.
- e. The highest ranking official may delegate responsibility to certify the MRFs in his or her absence. Authorizations for other individuals to certify shall be made in accordance with N.J.A.C. 7:14A-4.9(b).
- f. Monitoring results shall be submitted in accordance with the current NJPDES MRF Reference Manual and any updates thereof.
- g. If monitoring for a parameter is not required in a monitoring period, the permittee must report "CODE=N" for that parameter.
- h. If, for a monitored location, there are no discharge events during an entire monitoring period, the permittee must notify the Department when submitting the monitoring results by checking the "No Discharge this monitoring period" box on the paper or electronic version of the monitoring report submittal form.

7. Operator Certification

- a. Pursuant to N.J.A.C. 7:10A-1.1 et seq. every wastewater system not exempt pursuant to N.J.A.C. 7:10A-1.1(b) requires a licensed operator. The operator of a system shall meet the Department's requirements pursuant to N.J.A.C. 7:10A-1.1 and any amendments. The name of the proposed operator, where required shall be submitted to the Department at the address below, in order that his/her qualifications may be determined prior to initiating operation of the treatment works.
 - i. Notifications shall be submitted to:
State of New Jersey Department of Environmental Protection, Division of Water Supply & Geoscience, Bureau of Water System Engineering, Mail Code: 401-04Q, PO Box 420, Trenton, New Jersey 08625-0420.
- b. The permittee shall notify the Department of any changes in licensed operator within two weeks of the change.

8. Operation Restrictions

- a. The operation of a waste treatment or disposal facility shall at no time create: (a) a discharge, except as authorized by the Department in the manner and location specified in Part III of this permit; (b) any discharge to the waters of the state or any standing or ponded condition for water or waste, except as specifically authorized by a valid NJPDES permit.

9. Residuals Management

- a. The permittee shall comply with land-based sludge management criteria and shall conform with the requirements for the management of residuals and grit and screenings under N.J.A.C. 7:14A-6.15(a), which includes:
 - i. Standards for the Use or Disposal of Residual, N.J.A.C. 7:14A-20;
 - ii. Section 405 of the Federal Act governing the disposal of sludge from treatment works treating domestic sewage;
 - iii. The Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and the Solid Waste Management Rules, N.J.A.C. 7:26;
 - iv. The Sludge Quality Assurance Regulations, N.J.A.C. 7:14C;
 - v. The Statewide Sludge Management Plan promulgated pursuant to the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., and the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq.; and
 - vi. The provisions concerning disposal of sewage sludge and septage in sanitary landfills set forth at N.J.S.A. 13:1E-42 and the Statewide Sludge Management Plan.
 - vii. Residual that is disposed in a municipal solid waste landfill unit shall meet the requirements in 40 CFR Part 258 and/or N.J.A.C. 7:26 concerning the quality of residual disposed in a municipal solid waste landfill unit. (That is, passes the Toxicity Characteristic Leaching Procedure and does not contain "free liquids" as defined at N.J.A.C. 7:14A-1.2.)
- b. If any applicable standard for residual use or disposal is promulgated under section 405(d) of the Federal Act and Sections 4 and 6 of the State Act and that standard is more stringent than any limitation on the pollutant or practice in the permit, the Department may modify or revoke and reissue the permit to conform to the standard for residual use or disposal.
- c. The permittee shall make provisions for storage, or some other approved alternative management strategy, for anticipated downtimes at a primary residual management alternative. The permittee shall not be permitted to store residual beyond the capacity of the structural treatment and storage components of the treatment works. N.J.A.C. 7:14A-20.8(a) and N.J.A.C. 7:26 provide for the temporary storage of residuals for periods not exceeding six months, provided such storage does not cause pollutants to enter surface or ground waters of the State. The storage of residual for more than six months is not authorized under this permit. However, this prohibition does not apply to residual that remains on the land for longer than six months when the person who prepares the residual demonstrates that the land on which the residual remains is not a surface disposal site or landfill. The demonstration shall explain why residual must remain on the land for longer than six months prior to final use or disposal, discuss the approximate time period during which the residual shall be used or disposed and provide documentation of ultimate residual management arrangements. Said demonstration shall be in writing, be kept on file by the person who prepares residual, and submitted to the Department upon request.
- d. The permittee shall comply with the appropriate adopted District Solid Waste or Sludge Management Plan (which by definition in N.J.A.C. 7:14A-1.2 includes Generator Sludge Management Plans), unless otherwise specifically exempted by the Department.
- e. The preparer must notify and provide information necessary to comply with the N.J.A.C. 7:14A-20 land application requirements to the person who applies bulk residual to the land. This shall include, but not be limited to, the applicable recordkeeping requirements and certification statements of 40 CFR 503.17 as referenced at N.J.A.C. 7:14A-20.7(j).

- f. The preparer who provides residual to another person who further prepares the residual for application to the land must provide this person with notification and information necessary to comply with the N.J.A.C. 7:14A-20 land application requirements.
- g. Any person who prepares bulk residual in New Jersey that is applied to land in a State other than New Jersey shall comply with the requirement at N.J.A.C. 7:14A-20.7(b)1.ix to submit to the Department written proof of compliance with or satisfaction of all applicable statutes, regulations, and guidelines of the state in which land application will occur.

PART III

LIMITS AND MONITORING REQUIREMENTS

MONITORED LOCATION:

002A SW Outfall

RECEIVING STREAM:

Delaware River

STREAM CLASSIFICATION:

Mainstem Delaware-Zone 4

DISCHARGE CATEGORY(IES):

B - Industrial Wastewater

Location Description

DSN 002A shall discharge NCCW (high-volume) and low volume wastewater to Zone 4 of the Delaware River. Samples for effluent monitoring shall be taken at Latitude 39° 50' 33.4" and Longitude 75° 13' 14.5", after the last treatment step and before the effluent enters the GCUA discharge pipeline.

Contributing Waste Types

Boiler blowdown, Non-contact Cooling Water

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

See Part IV, Section D.5.b and E.6.b regarding concurrent sampling of Acute and Chronic WET samples between GCUA's DSN 001A, DSN 004A and WDES DSN 002A.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	MGD	*****	*****	*****	*****	Continuous	Metered
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Daily Minimum	*****	9.0 Daily Maximum	SU	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	*****	*****	*****	*****	60 Monthly Average	REPORT Daily Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Oil and Grease	Effluent Gross Value	*****	*****	*****	*****	10 Monthly Average	15 Instant Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

See Part IV, Section D.5.b and E.6.b regarding concurrent sampling of Acute and Chronic WET samples between GCUA's DSN 001A, DSN 004A and WDES DSN 002A.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Nitrogen, Ammonia Total (as N)	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	MG/L	1/Quarter	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Dissolved (TDS)	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Dissolved (TDS)	Effl. Adjusted Value	*****	*****	*****	*****	REPORT Monthly Average	5000 Daily Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Chemical Oxygen Demand (COD)	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			
LC50 Stat 96hr Acu Ceriodaphnia	Effluent Gross Value	*****	*****	*****	REPORT Report Per Minimum	*****	*****	%EFFL	1/6 Months	Composite
January thru December	AL	***	***		50	***	***			
IC25 Statre 7day Chr Ceriodaphnia	Effluent Gross Value	*****	*****	*****	REPORT Report Per Minimum	*****	*****	%EFFL	1/6 Months	Composite
January thru December	QL	***	***		***	***	***			
Temperature, oC	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	34 Daily Maximum	DEG.C	1/Month	Grab
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

See Part IV, Section D.5.b and E.6.b regarding concurrent sampling of Acute and Chronic WET samples between GCUA's DSN 001A, DSN 004A and WDES DSN 002A.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Chlorine, Free Available	Effluent Gross Value	*****	*****	*****	*****	0.19 Monthly Average	0.47 Daily Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Selenium, Total Recoverable	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/6 Months	Grab
January thru December	QL	***	***		***	***	***			
Copper, Total Recoverable	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/6 Months	Grab
January thru December	QL	***	***		***	***	***			
1,2-Dichloroethane	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/6 Months	Grab
January thru December	QL	***	***		***	***	***			
Tetrachloroethylene	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/6 Months	Grab
January thru December	QL	***	***		***	***	***			
Trichloroethene	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Daily Maximum	UG/L	1/6 Months	Grab
January thru December	QL	***	***		***	***	***			

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Cyanide, Total (as CN)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Arsenic, Total Recoverable (as As)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Thallium, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Beryllium, Total Recoverable (as Be)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Barium, Total Recoverable (as Ba)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Nickel, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Silver, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Zinc, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Cadmium, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Lead, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chromium, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Antimony, Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Mercury Total Recoverable	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Acenaphthylene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Acenaphthene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Anthracene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benzo(b)fluoranthene (3,4-benzo)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benzo(k)fluoranthene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benzo(a)pyrene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bis(2-chloroethyl) ether	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bis(2-chloroethoxy) methane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bis (2-chloroiso- propyl) ether	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Butyl benzyl phthalate	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chrysene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Diethyl phthalate	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Dimethyl phthalate	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2-Diphenyl- hydrazine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Fluoranthene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Fluorene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Hexachlorocyclo- pentadiene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Hexachloroethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Indeno(1,2,3-cd)-pyrene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Isophorone	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-nitrosodi-n-propylamine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-nitrosodiphenylamine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-nitrosodimethylamine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Nitrobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Phenanthrene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Pyrene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benzo(ghi)perylene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benzo(a)anthracene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2-Dichlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2,4-Trichlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Dibenzo(a,h)anthracene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,3-Dichlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
1,4-Dichlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2-Chloronaphthalene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Di-n-octyl Phthalate	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4-Dinitrotoluene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,6-Dinitrotoluene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
3,3'-Dichloro-benzidine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
4-Bromophenyl phenyl ether	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Naphthalene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bis(2-ethylhexyl) phthalate	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Di-n-butyl phthalate	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benzidine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Malathion	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Demeton	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Hexachlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Hexachlorobutadiene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Mirex	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,3-Dichloropropene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2,4,5-Tetrachloro-benzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-nitrosodiethyl-amine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-nitrosopyrrolidine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Carbon Tetrachloride	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bromoform	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chloroform	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Toluene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Benzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Acrolein	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Acrylonitrile	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chlorodibromomethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Ethylbenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Methyl Bromide	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Methyl Chloride	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Methylene Chloride	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,1-Dichloroethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,1-Dichloroethylene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,1,1-Trichloro-ethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,1,2-Trichloro-ethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,1,2,2-Tetrachloro-ethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2-Dichloropropane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
1,2-trans-Dichloro-ethylene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2-Chloroethyl Vinyl Ether (Mixed)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bromodichloromethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Vinyl Chloride	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Methoxychlor	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
N-Nitrosodi-n-butylamine	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Chloroethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Asbestos (Fibrous)	Effluent Gross Value	REPORT	FIBERS/L	Grab	January thru December
Parachloro-m-cresol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Parathion	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4,5-Trichloro-phenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Delta BHC, Total (ug/l)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Endosulfan Sulfate	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Beta Endosulfan	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Alpha Endosulfan	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Endrin Aldehyde	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,3,7,8-Tetrachloro-dibenzo-p-dioxin	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
4,4'-DDT(p,p'-DDT)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
4,4'-DDD(p,p'-DDD)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
4,4'-DDE(p,p'-DDE)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Aldrin	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:**Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Alpha BHC	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Beta BHC	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Gamma BHC (lindane),	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chlordane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Dieldrin	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Endosulfans, Total (alpha and beta)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Endrin	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Toxaphene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Heptachlor	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Heptachlor Epoxide	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Chlorpyrifos	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2-Chlorophenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2-Nitrophenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4-Dichlorophenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4-Dimethylphenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
2,4-Dinitrophenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4,6-Trichloro-phenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
4-Chlorophenyl phenyl ether	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
4-Nitrophenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
4,6-Dinitro-o-cresol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Phenol Single Compound	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Pentachlorophenol	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Pentachlorobenzene	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Guthion	Effluent Gross Value	REPORT	UG/L	Grab	January thru December

MONITORED LOCATION:

003A SW Internal

RECEIVING STREAM:

Delaware River

STREAM CLASSIFICATION:

Mainstem Delaware-Zone 4

DISCHARGE CATEGORY(IES):

B - Industrial Wastewater

Location Description

DSN 003A is a monitoring point subject to ELGs that includes Unit 1 Heat Recovery Steam Generator Blowdown and Evaporative Cooler Blowdown. These wastestreams ultimately discharge to Zone 4 of the Delaware River via DSN 002A. Samples shall be taken at Latitude 39° 50' 29.6" and Longitude 75° 13' 15.1".

Contributing Waste Types

Boiler blowdown

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Table III - B - 1: Surface Water DMR Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	MGD	*****	*****	*****	*****	Continuous	Metered
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Instant Minimum	*****	9.0 Instant Maximum	SU	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	*****	*****	*****	*****	30 Monthly Average	100 Daily Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:
Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Table III - B - 1: Surface Water DMR Limits and Monitoring Requirements										
PHASE: Final		PHASE Start Date:			PHASE End Date:					
Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Oil and Grease	Effluent Gross Value	*****	*****	*****	*****	15 Monthly Average	20 Instant Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

004A SW Internal

RECEIVING STREAM:

Delaware River

STREAM CLASSIFICATION:

Mainstem Delaware-Zone 4

DISCHARGE CATEGORY(IES):

B - Industrial Wastewater

Location Description

DSN 004A is a monitoring point subject to ELGs that includes Unit 2 Heat Recovery Steam Generator Blowdown and Evaporative Cooler Blowdown. These wastestreams ultimately discharge to Zone 4 of the Delaware River via DSN 002A. Samples shall be taken at Latitude 39° 50' 29.6" and Longitude 75° 13' 16.8".

Contributing Waste Types

Boiler blowdown

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Table III - C - 1: Surface Water DMR Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	MGD	*****	*****	*****	*****	Continuous	Metered
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Instant Minimum	*****	9.0 Instant Maximum	SU	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	*****	*****	*****	*****	30 Monthly Average	100 Daily Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Table III - C - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE:Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Oil and Grease	Effluent Gross Value	*****	*****	*****	*****	15 Monthly Average	20 Instant Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

005A SW Internal

RECEIVING STREAM:

Delaware River

STREAM CLASSIFICATION:

Mainstem Delaware-Zone 4

DISCHARGE CATEGORY(IES):

B - Industrial Wastewater

Location Description

DSN 005A is a monitoring point subject to ELGs that includes effluent from the Service Water/Floor Drain Oil Water Separator. These wastestreams ultimately discharge to Zone 4 of the Delaware River via DSN 002A. Samples shall be taken at Latitude 39° 50' 33.0" and Longitude 75°13' 14.8".

Contributing Waste Types

Process Water

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Table III - D - 1: Surface Water DMR Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	MGD	*****	*****	*****	*****	Continuous	Metered
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Instant Minimum	*****	9.0 Instant Maximum	SU	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	*****	*****	*****	*****	30 Monthly Average	100 Daily Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Table III - D - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Oil and Grease	Effluent Gross Value	*****	*****	*****	*****	15 Monthly Average	20 Instant Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			

MONITORED LOCATION:

006A SW Internal

RECEIVING STREAM:

Delaware River

STREAM CLASSIFICATION:

Mainstem Delaware-Zone 4

DISCHARGE CATEGORY(IES):

B - Industrial Wastewater

Location Description

DSN 006A is a monitoring point subject to ELGs that includes Reverse Osmosis system blowdown. This wastestream ultimately discharges to Zone 4 of the Delaware River via DSN 002A. Samples shall be taken at Latitude 39° 50' 31.9" and Longitude 75° 13' 14.5".

Contributing Waste Types

R/O regeneration backwash

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Table III - E - 1: Surface Water DMR Limits and Monitoring Requirements**PHASE:** Final**PHASE Start Date:****PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	MGD	*****	*****	*****	*****	Continuous	Metered
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Instant Minimum	*****	9.0 Instant Maximum	SU	1/Month	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	*****	*****	*****	*****	30 Monthly Average	100 Daily Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:
Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Table III - E - 1: Surface Water DMR Limits and Monitoring Requirements										
PHASE: Final		PHASE Start Date:			PHASE End Date:					
Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Oil and Grease	Effluent Gross Value	*****	*****	*****	*****	15 Monthly Average	20 Instant Maximum	MG/L	1/Month	Grab
January thru December	QL	***	***		***	***	***			

PART IV

SPECIFIC REQUIREMENTS: NARRATIVE

Industrial Wastewater

A. MONITORING REQUIREMENTS

1. Standard Monitoring Requirements

- a. Each analysis required by this permit shall be performed by a New Jersey Certified Laboratory that is certified to perform that analysis.
- b. The Permittee shall perform all water/wastewater analyses in accordance with the analytical test procedures specified in 40 CFR 136 unless other test procedures have been approved by the Department in writing or as otherwise specified in the permit.
- c. When more than one test procedure is approved for the analysis of a pollutant or pollutant parameter, the test procedure must be sufficiently sensitive as defined at 40 CFR 136, 40 CFR 122.21(e)(3), and 40 CFR 122.44(i)(1)(iv).
- d. All sampling shall be conducted in accordance with the Department's Field Sampling Procedures Manual, or an alternate method approved by the Department in writing.
- e. All monitoring shall be conducted as specified in Part III.
- f. All sample frequencies expressed in Part III are minimum requirements. Any additional samples taken consistent with the monitoring and reporting requirements contained herein shall be reported on the Monitoring Report Forms.
- g. Annual and semi-annual wastewater testing shall be conducted in a different quarter of each year so that tests are conducted in each of the four permit quarters of the permit cycle. Testing may be conducted during any month of the permit quarters.
- h. Any influent and effluent sampling for toxic pollutant analyses shall be collected concurrently.
- i. Flow shall be measured using a flow meter.
- j. Monitoring for temperature shall only be conducted when cooling water is discharged during the monitoring period.

B. RECORDKEEPING

1. Standard Recordkeeping Requirements

- a. The permittee shall retain records of all monitoring information, including 1) all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation (if applicable), 2) copies of all reports required by this NJPDES permit and 3) all data used to complete the application for a NJPDES permit, for a period of at least 5 years from the date of the sample, measurement, report, application or record.

Industrial Wastewater

- b. Records of monitoring information shall include 1) the date, locations, and time of sampling or measurements, 2) the individual(s) who performed the sampling or measurements, 3) the date(s) the analyses were performed, 4) the individual(s) who performed the analyses, 5) the analytical techniques or methods used, and 6) the results of such analyses.

C. SUBMITTALS

1. Standard Submittal Requirements

- a. The permittee shall amend the Operation & Maintenance Manual whenever there is a change in the treatment works design, construction, operations or maintenance which substantially changes the treatment works operations and maintenance procedures.

D. FACILITY MANAGEMENT

1. Discharge Requirements

- a. The permittee shall discharge at the location(s) specified in PART III of this permit.
- b. The permittee shall not discharge foam or cause foaming of the receiving water that: 1) Forms objectionable deposits on the receiving water, 2) Forms floating masses producing a nuisance, or 3) Interferes with a designated use of the waterbody.
- c. The permittee's discharge shall not produce objectionable color or odor in the receiving stream.
- d. The discharge shall not exhibit a visible sheen.

- e. The Permittee is authorized to use the following corrosion inhibitors, biocides, or other cooling water additives:

Non-Contact Cooling Water

ChemTreat RL 124 (Sodium Bisulfite)
Caustic Soda Liquid 50% (Sodium Hydroxide)
25% Caustic Soda Liquid (Sodium Hypochlorite)
Sulfuric Acid 66 BE (Sulfuric Acid)

Pretreatment of the GCUA Treated Effluent

Caustic (Sodium Hydroxide), and Sodium Hypochlorite.

Ultrafiltration

P828L, CL5695 Citric Acid 50%,

Reverse Osmosis

RL9004, RL124, CL206, and RL1302, Ferric Chloride.

Heat Recovery Steam Generator (HRSG)/Auxiliary Boiler

BL1794, Ammonia, BL1260, BL-8301, and BL152.

Cooling Tower

FO-182, CL5437, Sulfuric acid, Foam Blast, and Sodium Hypochlorite.

Closed Cooling System

DowFrost HD (inhibited propylene glycol)
DowFrost HTF (supplemental copper corrosion inhibitor)

For the Inclined Plate Settler:

P8281L (ferric sulfate)
P850L (anionic polymer)

If the permittee decides to begin using additives containing equivalent active ingredients to those already authorized, the permittee must notify the Department at least 60 days prior to use. If the permittee decides to begin using any additional or different additives in the future, the permittee must notify the Department at least 180 days prior to use so that the permit may be reopened to incorporate any additional limitations deemed necessary.

2. Delaware River Basin Commission (DRBC)

- a. The permittee shall comply with the Delaware River Basin Commission (DRBC) Water Quality Regulations.
- b. Except as otherwise authorized by this permit, if the permittee seeks relief from any limitation based upon a Delaware River Basin Commission water quality standard or minimum treatment requirement, the permittee shall apply for approval from the Delaware River Basin Commission Executive Director and NJDEP for a permit revision.
- c. The permittee may conduct a study to determine if specific conductance may be substituted for TDS in the permit. The study should include effluent specific data to be used to determine a correlation between TDS and specific conductance. Upon review, the Delaware River Basin Commission will determine if the permit may be modified to allow the substitution of specific conductance for TDS monitoring. The TDS limit would then be supplanted by a specific conductance limit in the permit.
- d. Prior to accepting for treatment and discharge 50,000 gallons per day or more (as a daily average) of wastewater that is imported from outside the Delaware River Basin, the permittee shall first apply to and obtain approval from the DRBC.
- e. Based upon the written recommendation of the DRBC staff, when the discharge is operated in accordance with the provisions and conditions established by this permit, then with respect to effluent quality and stream quality objectives, the project does not substantially impair or conflict with the Commission's Comprehensive Plan.

3. Applicability of Discharge Limitations and Effective Dates

- a. Surface Water Discharge Monitoring Report (DMR) Form Requirements
 - i. The final effluent limitations and monitoring conditions contained in PART III for DSN 002A apply for the full term of this permit action.
- b. Wastewater Characterization Report (WCR) Form Requirements
 - i. The final effluent monitoring conditions contained in PART III for DSN 002A apply for the full term of this permit action.

4. Operation, Maintenance and Emergency conditions

- a. The permittee shall operate and maintain treatment works and facilities which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit as specified in the Operation & Maintenance Manual.
- b. The permittee shall develop emergency procedures to ensure effective operation of the treatment works under emergency conditions in accordance with NJAC 7:14A-6.12(d).

5. Toxicity Testing Requirements - Acute Whole Effluent Toxicity

- a. The permittee shall conduct toxicity tests on its wastewater discharge in accordance with the provisions in this section. Such testing will determine if appropriately selected effluent concentrations adversely affect the test species.
- b. The WET tests for DSN 002A shall be conducted concurrently with the WET test taken at GCUA's DSN 001A and DSN 004A . WET tests performed at WDES shall account for the travel time it takes for the effluent sampled at GCUA to travel through the GCUA pipeline, through the West Deptford Energy Station's processes, and to WDES's DSN 002A.

- c. Acute toxicity tests shall be conducted using the test species and method identified in Part III of this permit.
- d. Any test that does not meet the specifications of N.J.A.C. 7:18, laboratory certification regulations, must be repeated within 30 days of the completion of the initial test. The repeat test shall not replace subsequent testing required in Part III.
- e. The permittee shall resubmit an Acute Methodology Questionnaire within 60 days of any change in laboratory.
- f. Submit an acute whole effluent toxicity test report within twenty-five days after the end of every semi-annual monitoring period beginning from the effective date of the permit (EDP).
- g. Test reports shall be submitted to:
 - i. biomonitoring@dep.nj.gov
 - ii. Toxicity@drbc.gov

6. Toxicity Testing Requirements - Chronic Whole Effluent Toxicity

- a. The permittee shall conduct toxicity tests on its wastewater discharge in accordance with the provisions in this section. Such testing will determine if appropriately selected effluent concentrations adversely affect the test species.
- b. The WET tests for DSN 002A shall be conducted concurrently with the WET test taken at GCUA's DSN 001A and DSN 004A . WET tests performed at WDES shall account for the travel time it takes for the effluent sampled at GCUA to travel through the GCUA pipeline, through the West Deptford Energy Station's processes, and to WDES's DSN 002A.
- c. Chronic toxicity tests shall be conducted using the test species and method identified in Part III of this permit.
- d. Any test that does not meet the specifications contained in the Department's "Chronic Toxicity Testing Specifications for Use in the NJPDES Program" document must be repeated within 30 days of the completion of the initial test. The repeat test shall not replace subsequent testing required in Part III.
- e. IC25 - Inhibition Concentration - Concentration of effluent which has an inhibitory effect on 25% of the test organisms for the monitored effect, as compared to the control (expressed as percent effluent).
- f. Test results shall be expressed as the IC25 for each test endpoint. Where a chronic toxicity testing endpoint yields IC25's from more than one test endpoint, the most sensitive endpoint will be used to evaluate effluent toxicity.
- g. The permittee shall resubmit a Chronic Methodology Questionnaire within 60 days of any change in laboratory.
- h. Submit a chronic whole effluent toxicity test report within twenty-five days after the end of every semi-annual monitoring period beginning from the effective date of the permit (EDP).
- i. Test reports shall be submitted to:
 - i. biomonitoring@dep.nj.gov

ii. Toxicity@drbc.gov

7. Toxicity Reduction Implementation Requirements (TRIR)

- a. The permittee shall initiate a tiered toxicity investigation if two out of six consecutive WET tests demonstrate that the effluent does not comply or will not comply with the toxicity limit or action level specified in Part III of this permit.
 - i. If the exceedence of the toxicity limit or action level is directly caused by a documented facility upset, or other unusual event which has been identified and appropriately remedied by the permittee, the toxicity test data collected during the event may be eliminated when determining the need for initiating a TRIR upon written Department approval.
- b. The permittee shall begin toxicity characterization within 30 days of the end of the monitoring period when the second toxicity test exceeds the toxicity limits or action levels in Part III. The monitoring frequency for toxicity testing shall be increased to semi-monthly (i.e. every two months). Up to 12 additional tests may be required.
 - i. The permittee may return to the toxicity testing frequency specified in Part III if four consecutive toxicity tests conducted during the Toxicity Characterization do not exceed the toxicity limit or action level.
 - ii. If two out of any six consecutive, acceptable tests again exceed the toxicity limit or action level in Part III, the permittee shall repeat the Toxicity Reduction Implementation Requirements.
- c. The permittee shall initiate a preliminary toxicity identification (PTI) upon the fourth exceedence of the toxicity limit or action level specified in Part III during the toxicity characterization.
 - i. The permittee may return to the monitoring frequency specified in PART III while conducting the PTI. If more frequent WET testing is performed during the PTI, the permittee shall submit all biomonitoring reports to the DEP and report the results for the most sensitive species on the DMR.
 - ii. As appropriate, the PTI shall include:
 - (1) treatment plant performance evaluation,
 - (2) pretreatment program information,
 - (3) evaluation of ammonia and chlorine produced oxidants levels and their effect on the toxicity of the discharge,
 - (4) evaluation of chemical use and processes at the facility, and
 - (5) an evaluation of incidental facility procedures such as floor washing, and chemical spill disposal which may contribute to effluent toxicity.
 - iii. If the permittee demonstrates that the cause of toxicity is the chlorine added for disinfection or the ammonia concentration in the effluent and the chlorine and/or ammonia concentrations are below the established water quality based effluent limitation for chlorine and/or ammonia, the permittee shall identify the procedures to be used in future toxicity tests to account for chlorine and/or ammonia toxicity in their preliminary toxicity identification report.
 - iv. The permittee shall submit a Preliminary Toxicity Identification Notification within 15 months of triggering TRIR. This notification shall include a determination that the permittee intends to demonstrate compliance OR plans to initiate a CTI.

- d. The permittee must demonstrate compliance with the WET limitation or action level in four consecutive WET tests to satisfy the requirements of the Toxicity Reduction Investigation Requirements. After successful completion, the permittee may return to the WET monitoring frequency specified in PART III.
- e. The permittee shall initiate a Comprehensive Toxicity Investigation (CTI) if the PTI does not identify the cause of toxicity and a demonstration of consistent compliance with the toxicity limit or action level in Part III can not be made.
 - i. The permittee shall develop a project study plan identifying the party or parties responsible for conducting the comprehensive evaluation, establish a schedule for completing the study, and a description of the technical approach to be utilized.
 - ii. If the permittee determines that the PTI has failed to demonstrate consistent compliance with the toxicity limit or action level in Part III, a Comprehensive Toxicity Investigation Workplan must be prepared and submitted within 90 days.
 - iii. The permittee shall summarize the data collected and the actions taken in CTI Quarterly Reports. The reports shall be submitted within 30 calendar days after the end of each quarter.
 - iv. The permittee shall submit a Final CTI Report 90 calendar days after the last quarterly report. The final CTI report shall include the corrective actions identified to reduce toxicity and a schedule for implementing these corrective actions.
- f. Upon receipt of written approval from the Department of the corrective action schedule, the permittee shall implement those corrective actions consistent with that schedule.
 - i. The permittee shall satisfy the requirements of the Toxicity Reduction Implementation Requirements and return to the original toxicity monitoring frequency after corrective actions are implemented and the permittee demonstrates consistent compliance with the toxicity limit or action level in Part III in four consecutive toxicity tests.
 - ii. If the implemented corrective measures do not result in consistent compliance with the toxicity limit or action level in Part III, the permittee shall submit a plan for resuming the CTI.
 - iii. Documents regarding Toxicity Investigations shall be sent to the following:
New Jersey Department of Environmental Protection
Mail Code 401-02B
Division of Water Quality
Bureau of Surface Water & Pretreatment Permitting
401 East State Street
P.O. Box 420
Trenton, New Jersey 08625-0420

E. CONDITIONS FOR MODIFICATION

1. Notification requirements

- a. The permittee may request a minor modification for a reduction in monitoring frequency for a non-limited parameter when four consecutive test results of "not detected" have occurred using a test procedure that is sufficiently sensitive as defined at 40 CFR 136, 40 CFR 122.21(e)(3), and 40 CFR 122.44(i)(1)(iv).

2. Causes for modification

- a. The Department may modify or revoke and reissue any permit to incorporate 1) any applicable effluent standard or any effluent limitation, including any effluent standards or effluent limitations to control the discharge of toxic pollutants or pollutant parameters such as acute or chronic whole effluent toxicity and chemical specific toxic parameters, 2) toxicity reduction requirements, or 3) the implementation of a TMDL or watershed management plan adopted in accordance with N.J.A.C. 7:15-7.
- b. The permittee may request a minor modification to eliminate the monitoring requirements associated with a discharge authorized by this permit when the discharge ceases due to changes at the facility.

F. Custom Requirement

1. Alternative Discharge Component for DSN 002A

- a. During periods when WDES is not operating, WDES will continue to treat GCUA effluent with a Biological Activated Filter in order to maintain the microbes in the filter. This will continually produce Service Water which will not be needed for cooling during the shutdown. When the plant is not operating and cooling water is not being discharged, there may be overflows from the Service Water Tank via DSN 002A. The monitoring requirements and limitations that are in place when WDES is operating also apply to the discharge of unused Service Water overflowing from the Service Water Tank and discharging via DSN 002A.

2. Polychlorinated bi-phenyls (PCBs)

- a. In accordance with the Steam Electric ELGs, there shall be no discharge of PCB compounds, such as those commonly used for transformer fluid.

3. Free Available Chlorine Requirement

- a. In accordance with 40 CFR Part 423.15(j)(2), neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the Department that the units in a particular location cannot operate at or below this level of chlorination.

APPENDIX A:

**CHRONIC TOXICITY TESTING SPECIFICATIONS
FOR USE IN THE NJPDES PERMIT PROGRAM**

Version 3.0

May 2017

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VIII. REFERENCES

Notice: Mention of trade names or commercial products do not constitute endorsement or recommendation for use.

I. AUTHORITY AND PURPOSE

These methods specifications for the conduct of whole effluent chronic toxicity testing are established under the authority of the NJPDES permitting program, N.J.A.C. 7:14A-6.5(a)2 and 40 CFR 136, for discharges to waters of the State. The methods referenced herein are included by reference in 40 CFR 136, Table 1.A. and, therefore, constitute approved methods for chronic toxicity testing. The information contained herein serves to clarify testing requirements and outline and implement the interlaboratory Standard Reference Toxicant Program until specific chronic requirements are incorporated into the laboratory certification regulations under N.J.A.C. 7:18. As such these methods are intended to be used to determine compliance with discharge permits issued under the authority of the NJPDES permit program. Tests are to be conducted in accordance with the general conditions and method specifications (test organism specific) contained in this document. All other conditions and specifications can be found in 40 CFR 136 and USEPA methodologies.

Until a subchapter on chronic toxicity testing within the regulations governing the certification of laboratories and environmental measurements (N.J.A.C. 7:18) becomes effective, tests shall be conducted in conformance with the methodologies as designated herein and contained in 40 CFR 136. The laboratory performing the testing shall possess certification for the applicable chronic methodologies incorporated by reference through the laboratory certification program established under N.J.A.C. 7:18, as required by N.J.A.C. 7:9B-1.5(c)5.

These methods are incorporated into discharge permits as enforceable permit conditions. Each discharge permit will specify in Parts III&IV of the permit, the test species specific methods from this document that will be required under the terms of the discharge permit. Although the test species specific methods for each permit are determined on a case-by-case basis, the purpose of this methods document is to assure consistency among dischargers and to provide certified laboratories with information on the universe of tests to be utilized so that they can make the necessary preparations, including completing the required Standard Reference Toxicant testing. Please note that these methodologies are required for compliance testing only. Facilities and/or laboratories conducting testing under the requirements of a Toxicity Identification Evaluation or for informational purposes are not bound by these methods.

This document constitutes the fifth version of the NJDEP's interim chronic methodologies. This version contains no significant changes to the test methods themselves.

II. GENERAL CONDITIONS

A. LABORATORY SAFETY, GLASSWARE, ETC.

All safety procedures, glassware cleaning procedures, etc., shall be in conformance with 40 CFR 136 and USEPA's "Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms," "Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms" and N.J.A.C. 7:18.

B. TEST CONCENTRATIONS / REPLICATES

All testing is to be performed with a minimum of five effluent concentrations plus a dilution water control. A second reference water control is optional when a dilution water other than culture water is used. The use of both a 0.5 or 0.75 dilution factor is acceptable for the selection of test concentrations. The Department recommends the use of the 5 standard dilutions plus a dilution water control to cover the entire range of effluent test concentrations e.g. 0%, 6.25%, 12.5%, 25%, 50%, 100%.

The number of replicates used in the test must, at a minimum, satisfy the specifications of the applicable methods contained herein. Increased data sensitivity can be obtained by increasing the number of replicates equally among test concentrations and thus an increased number of replicates is acceptable. Further, the use of nonparametric statistical analysis requires a minimum of four replicates per test concentration. If the data for any particular test is not conducive to parametric analyses and if less than four replicates were included, the test may not be considered acceptable for compliance purposes.

The use of single concentration tests consisting of the permit limitation as a concentration and a control is not permitted for compliance purposes, but may be used by a permittee in the conduct of a Toxicity Investigation Evaluation (TIE) or for information gathering purposes. Such a test would be considered a "pass" if there was no significant difference in test results, using hypothesis testing methods.

C. DILUTION WATER

1. Marine and Estuarine Waters

A high quality natural water, such as the Manasquan River Inlet is strongly recommended as the dilution water source for chronic toxicity testing with marine and estuarine organisms. The use of the receiving water as the dilution water source is not required. Saline waters prepared with hypersaline brine and deionized water may also be used as dilution water. Hypersaline brines shall be prepared from a high quality natural seawater and shall not exceed a concentration of 100 ppt. The type of dilution water for a permittee may not be changed without the prior approval of the Department.

The standard test salinity shall be 25 ppt. Since most effluents are freshwater based, in most cases it will be necessary to adjust the salinity of the test concentrations to the standard test salinity.

2. Fresh Waters

A high quality natural water, such as Round Valley Reservoir (if access is allowed) or Lake Hopatcong, is recommended as the dilution water source for chronic toxicity testing with freshwater organisms. It is not required to perform the toxicity testing with the receiving water as dilution water. Tests performed with reconstituted water or up to 20% Diluted Mineral Water (DMW) as dilution water is acceptable. For testing with *Ceriodaphnia dubia*, the addition of 5 µg/l selenium (2 µg/l selenium with natural water) and 1 µg/l vitamin B12 is recommended (Keating and Dagbusan, 1984; Keating, 1985 and 1988). The source of a dilution water for a permittee may not be changed without the prior approval of the Department through the completion of a Whole

Effluent toxicity testing methodology questionnaire. Reconstituted water and DMW should be prepared with Millipore Super Q^R or equivalent, meet the requirements of N.J.A.C. 7:18-6 and should be aerated a minimum of 24 hrs prior to use, but not supersaturated.

D. EFFLUENT SAMPLE COLLECTION

Effluent samples shall be representative of the discharge being regulated. For each discharge serial number (DSN), the effluent sampling location shall be the same as that specified in the NJPDES permit for other sampling parameters unless an alternate sampling point is specified in the NJPDES discharge permit. For continuous discharges, effluent sampling shall consist of 24 hour composite samples consisting either of equal volumes taken once every hour or of a flow-proportionate composite sample, unless otherwise approved by the Department. Unless otherwise specified, three samples shall be collected as specified above, preferably one every other day. The first sample should be used for test initiation and the first renewal. The second sample for the next two renewals. The third sample should be used for the final three renewals. For the *Selenastrum* test, a single sample shall be collected not more than 24 hours prior to test initiation. In no case, shall more than 36 hours' elapse between collection and first use of the sample. It is acceptable to collect samples more frequently for chronic WET testing and if samples are collected daily for acute toxicity testing conducted concurrently, available samples may be used to renew the test solutions as appropriate.

For all other types of discharges, effluent sampling shall be conducted according to specifications contained within the discharge permit, methodology questionnaire, or as otherwise specified by the Department. The use of grab samples or other special sampling procedures may be approved by the Department based on time of occurrence and duration of intermittent discharge events.

If a municipal discharger has concerns that the concentrations of ammonia and/or chlorine in an effluent are adequate to cause violations of the permit limit for chronic toxicity testing, the permittee should conduct analyses, as specified in USEPA's toxicity investigation methods documents, to illustrate the relationship between chronic effluent toxicity and chlorine and/or ammonia as applicable. This data may then be submitted to the Department as justification for a request to use modified test procedures, which account for ammonia and/or chlorine toxicity, in future chronic toxicity tests. The Department may, where adequate justification exists, permit the adjustment of these pollutants in the effluent sample if discharge limits for these pollutants are contained in the NJPDES permit and those permit limitations are adequate for the protection of water quality. Any proposed modified test procedures to adjust effluent chlorine and/or ammonia shall be approved by the Department prior to use of those test procedures for any compliance testing.

Except for filtration through a 2 mm or larger screen or an adjustment to the standard test salinity, no other adjustments to the effluent sample shall be made without prior written approval by the Department. When a laboratory adjusts a freshwater effluent salinity and the pH of the test concentration changes more than 0.5 pH units from the initial pH, the laboratory shall readjust the pH of the test concentration to within 0.5 pH units of the original test concentration. Aeration of samples prior to test start shall be minimized where possible and samples shall not be aerated where adequate saturation exists to maintain dissolved oxygen.

E. PHYSICAL CHEMICAL MEASUREMENTS

At a minimum, the physical chemical measurements shall be as follows unless more stringent criteria is required by the method:

- ☐ pH and dissolved oxygen shall be measured at the beginning and end of each 24 hour exposure period, in at least one chamber, of each test concentration and the control. In order to ensure that measurements for these parameters are representative of the test concentrations during the test, measurements for these parameters should be taken in an additional replicate chamber for such concentrations which contains no test organisms, but is subject to the same test conditions.

- ☐ Temperature shall either be monitored continuously, measured daily in at least two locations in the environmental control system, or measured at the beginning and end of each 24 hr exposure period in at least one replicate for each treatment.
- ☐ Salinity shall be measured in all salt water tests at the beginning and end of each 24 hour exposure period, in at least one replicate for each treatment.
- ☐ For all freshwater tests, alkalinity, hardness and conductivity shall be measured in each new sample (100% effluent) and control.
- ☐ When natural salt water is used; nitrite, nitrate, and ammonia shall be measured in the control before each renewal in the mysid test only.
- ☐ For samples of discharges where concentrations of ammonia and/or chlorine are known or are suspected to be sufficient to cause toxicity, it is recommended that the concentrations of these pollutants be determined and submitted with the standardized report form. The laboratory is advised to consult with the permittee to determine if these parameters should be measured in the effluent. Where such measurements are deemed appropriate, measurements shall be conducted at the beginning of each 24 hour exposure period. Also, since a rise in the test pH can affect the toxicity of ammonia in the effluent, analysis of ammonia during the test may be appropriate if a rise in pH is accompanied by a significant increase in mortality.

F. STATISTICS

Special attention should be given to the omission and inclusion of a given replicate in the analysis of mysid fecundity data (USEPA 1994, p. 275) and *Ceriodaphnia* reproduction data (USEPA 1994, page 174).

Determination of acceptability criteria and average individual dry weight for the growth endpoints must follow the specifications in the applicable documents (e.g., p.84 for saltwater methods document.)

Use of nonparametric statistical analyses requires a minimum of four replicates per test concentration. If the data for any particular test are not conducive to parametric analyses and if less than four replicates were included, the test may not be acceptable to the Department.

For point estimate techniques, statistical analysis must follow the protocol contained in the approved testing method. The linear interpolation estimate IC_p values and not the bootstrap mean IC_p, shall be reported for permit compliance purposes. The IC_p value reported on the Discharge Monitoring Report shall be rounded off as specified in the Department's "NJPDDES Monitoring Report Form Reference Manual", updated December 2007, and available on the web at http://www.state.nj.us/dep/dwq/pdf/MRF_Manual.pdf for further information.

If the result reported by the IC_p method is greater than 100% effluent, the test result is reported as ">100%"

If separate IC₂₅'s can be calculated from multiple test endpoints, for example a reproductive and/or growth endpoint and a survival endpoint, the lowest IC₂₅ value expressed in units of "% effluent" will be used to determine permit compliance and should, therefore, be reported as the IC₂₅ value for the test. If the IC₂₅ value for growth and/or reproduction is not lower than that for survival, the IC₂₅ value reported for the test shall be as survival. For saltwater tests, where additional controls are used in a test (i.e. brine and/or artificial sea salt control), a T-test shall be used to determine if there is a significant difference between the original test control and the additional controls. If there is a significant difference between any of the controls, the test may be deemed unacceptable and if so, will not be used for permit compliance.

III. TEST ACCEPTABILITY CRITERIA

Any test that does not meet the test acceptability criteria of the chronic toxicity method will not be used by the Department for any purpose and must be repeated as soon as practicable, with freshly collected samples.

1. Tests must be performed by a laboratory approved for the conduct of chronic toxicity tests and certified for chronic toxicity testing under N.J.A.C. 7:18.
2. Test results may be rejected due to inappropriate sampling, including the use of less than three effluent samples in a test and/or use of procedures not specified in a permit or methodology questionnaire, use of frozen samples, not refrigerating samples upon collection, or unapproved pretreatment of an effluent sample.
3. Controls shall meet, at a minimum, the applicable performance criteria specified in the Table 2.0 and in the individual method specifications contained herein.
4. Acceptable and applicable Standard Reference Toxicant Data must be available for the test.
5. No unapproved deviations from the applicable test methodology may be present.
6. When using hypothesis testing techniques, a deviation from the dose response as explained in the statistical portion of this document shall not be present in the data.
7. If more stringent criteria are required within the chronic toxicity test method or rule, the more stringent criteria must be met.

Table 2.0:

CONTROL PERFORMANCE

TEST ORGANISM	MINIMUM SURVIVAL	MINIMUM WEIGHT GAIN	MINIMUM FECUNDITY/ REPRODUCTION
<i>Pimephales promelas</i>	80%	0.25 mg avg	N/A
<i>Ceriodaphnia dubia</i>	80%	N/A	Average of ≥ 15 young per surviving female
<i>Selenastrum capricornutum</i>	Density $> 2 \times 10^5$ cells/ml	N/A	Variability in controls not to exceed 20%.
<i>Cyprinodon variegatus</i>	80%	0.60 mg (unpreserved) avg 0.50 mg (preserved) avg	N/A
<i>Menidia beryllina</i>	80%	0.50 mg (unpreserved) avg 0.43 mg (preserved) avg	N/A
<i>Mysidopsis bahia</i>	80%	0.20 mg per mysid avg	egg production by 50% of control females if fecundity is used as an endpoint.

THE DETERMINATION OF A TEST AS UNACCEPTABLE DOES NOT RELIEVE THE FACILITY FROM MONITORING FOR THAT MONITORING PERIOD

IV. STANDARD REFERENCE TOXICANT TESTING

All chronic testing shall be accompanied by testing with a Standard Reference Toxicant (SRT) as a part of each laboratory's internal quality control program. Such a testing program must be consistent with the quality assurance/quality control protocols described in the USEPA chronic testing manuals. Laboratories may utilize the reference toxicant of their choice and toxicants such as cadmium chloride, potassium chloride, sodium dodecyl sulfate and copper sulfate are all acceptable. However, Potassium chloride has been chosen by several laboratories and is recommended by the Department. The concentration of the reference toxicant shall be verified by chemical analysis in the low and high test concentrations once each year or every 12 tests, whichever is less. It is not necessary to run SRT tests, for all species using the same SRT.

A. INITIAL STANDARD REFERENCE TOXICANT (SRT) TESTING REQUIREMENTS

At a minimum, this testing shall include an initial series of at least five SRT tests for each test species method. Acceptable SRT testing for chronic toxicity shall be performed utilizing the short term chronic toxicity test methods as specified herein. Reference toxicant tests utilizing acute toxicity testing methods, or any method other than those contained in this document are not acceptable. The laboratory should forward results of the initial SRT testing, including control charts, the name of the reference toxicant utilized, the supplier and appropriate chemical analysis of the toxicant to the Department's laboratory certification program prior to obtaining certification for chronic toxicity testing. Certification for the applicable chronic toxicity method must be obtained prior to the conduct of any chronic toxicity testing for compliance purposes.

B. SUBSEQUENT SRT TESTING REQUIREMENTS

After receiving the initial approval from the Department to conduct chronic toxicity tests for compliance purposes, subsequent SRT testing shall be conducted as follows:

1. Where organisms used in testing are cultured at the testing laboratory, SRT testing must be conducted at least once per month for each species/method.
2. Where the laboratory purchases organisms for the conduct of chronic toxicity testing for the test organism in question, the testing laboratory must conduct a concurrent SRT per lot of organisms, unless the supplier provides at least the most recent five monthly SRT's using the same toxicant and control conditions. SRT data provided by the supplier for each lot of organisms purchased is acceptable as long as the SRT test result falls within the control limits of the control chart established by the supplier for that organism. The laboratory using purchased organisms is responsible for the results of any compliance tests they perform.
3. A testing laboratory purchasing organisms from a supplier laboratory must still perform SRT testing on a monthly basis at a minimum, for each species they test with, in order to adequately document their own interlaboratory precision.
4. If a testing laboratory purchasing organisms elects not to use the SRT data from a "supplier laboratory" or such data is unavailable or where organisms are purchased from another organism supplier, the testing laboratory must conduct SRT testing on each lot of organisms purchased.
5. If a testing laboratory conducts testing for a species/method less frequently than monthly, then an SRT shall be run concurrent with the toxicity test.

NOTE: Based on these requirements, SRT data are considered applicable to a compliance test when the SRT test results are acceptable and the SRT test is conducted within 30 days of the compliance test, for the test species and SRT in question. Therefore, it is not necessary for an approved laboratory to run an SRT test every month if the laboratory is not conducting compliance tests for a particular species.

C. CHANGING OF AN ESTABLISHED REFERENCE TOXICANT

The SRT used for any species by a laboratory may be changed at any time provided that the following conditions have been satisfied:

1. A series of at least three reference toxicant tests are conducted with the new reference toxicant and the results of those tests are identified as satisfactory, in writing, by the Department.
2. Laboratories must continue using the already approved SRT in their ongoing QA/QC program, until such time as the letter referenced above, is received by the laboratory.

D. CONTROL CHARTS

Control charts shall be established from SRT test results in accordance with the procedures outlined in the USEPA methods documents. Control charts shall be constructed using IC25's using the following methods:

1. The upper and lower control limits shall be calculated by determining +/- two standard deviations above and below the mean.
2. SRT test results which exhibit an IC25 that is greater than the highest concentration tested or less than the lowest concentration tested (i.e. a definitive endpoint cannot be determined), shall not be used to establish control charts.
3. SRT tests which do not meet the acceptability criteria for a specific species shall not be used to establish control charts.
4. All values used in the control charts should be as nominal concentrations. However, the control charts shall be accompanied by a chart tabulating the test results as measured concentrations.
5. An outlier (i.e. values which fall outside the upper and lower control limits) should be included on the control chart unless it is determined that the outlier was caused by factors not directly related to the test organisms (e.g., test concentration preparation) as the source of variability would not be directly applicable to effluent tests. In such case, the result and explanation shall be reported to the Department within 30 days of the completion of the SRT test.

The control chart established for the initial series of SRT data submitted will be used by the laboratory and the Department to determine outliers from SRT test results reported in the "NJPDES Biomonitoring Report Form - Chronic Toxicity Test" submitted by the permittees for the test species. These initial control limits will remain unchanged until twenty SRT tests have been completed by the laboratory.

The following procedures shall be used for continually updating control charts after twenty acceptable SRT tests have been completed:

1. Once a laboratory has completed twenty acceptable SRT tests for a test species, the upper and lower control limits shall be recalculated with those twenty values.
2. For each successive SRT test conducted after these first twenty tests, a moving average shall be calculated and the control limits reevaluated using the last twenty consecutive test results.
3. The upper and lower control limits shall be reported on the "NJPDES Biomonitoring Report Form - Chronic Toxicity Tests" along with the SRT test result.

E. UNACCEPTABLE SRT TEST RESULTS

If a laboratory produces any SRT test results which are outside the established upper and lower control limits for a test species at a frequency greater than one test in any twenty tests, the laboratory shall investigate sources of variability, take corrective actions to reduce identified sources of variability, and perform an additional SRT during the same month. The Department may not accept or may require repeat testing for any toxicity testing that may have been affected by such an occurrence.

If a laboratory produces two consecutive SRT test results or three out of any twenty test results which are outside the established upper and lower limits for a specific test species, the laboratory shall cease to conduct chronic toxicity tests for compliance purposes for that test species until the reason(s) for the outliers have been resolved. Approval to resume testing may be contingent upon the laboratory producing SRT test results within the established upper and lower control limits for that test species in two consecutive SRT tests. If one or both of those test results again fall outside the established control levels, the laboratory is unapproved for that test species until five consecutive test results within the established upper and lower control limits are submitted and approved by the Department.

F. ANNUAL SUBMITTALS

The Department may request, at any time, any information which is essential in the evaluation of SRT results and/or compliance data.

V. TEST CANCELLATION / RESCHEDULING EVENTS

A lab may become aware of QA problems during or immediately following a test that will prevent data from being submitted or a lab may be unable to complete a tests due to sample collection or shipping problems. If for any reason a chronic toxicity test is initiated and then prematurely ended by the laboratory the laboratory shall submit the form entitled "Chronic Whole Effluent Toxicity Testing Test Cancellation / Rescheduling Event Form" contained herein. This form shall be used to detail the reason for prematurely ending the test. This completed form and any applicable raw data sheets shall be submitted to the biomonitoring program at the address below within 30 days of the cessation of the test.

Tests are considered to be initiated once test organisms have been added to all test chambers.

Submission of this form does not relieve the facility from monitoring for that monitoring period.

VI. REPORTING

The report form entitled "NJPDES Biomonitoring Report Form - Chronic Toxicity Tests" should be used to report the results of all NJPDES chronic compliance biomonitoring tests. Laboratory facsimiles are acceptable but must contain all information included on any recent revisions of the form by the Department. Statistical printouts and raw data sheets (including chain of custody documents) for all endpoints analyzed shall be included with the report submitted to the Department. All chronic toxicity test report forms shall be submitted to the following email addresses as applicable:

biomonitoring@dep.nj.gov

Toxicity@drbc.gov

In addition, the results of all chronic toxicity tests conducted must be reported on the DMR form under the appropriate parameter code in the monitoring period in which the test was conducted.

VII. METHOD SPECIFICATIONS

The following method specifications shall be followed as specified in the NJPDES permit. Any changes to these methods will not be considered acceptable unless they are approved in writing by the Department, prior to their use.

- A. Fathead Minnow (*Pimephales promelas*), Larval Survival and Growth Test, method 1000.0
- B. *Ceriodaphnia dubia*, Survival and Reproduction Test, method 1002.0
- C. Algal, (*Selenastrum capricornutum*), Growth Test, method 1003.0
- D. Sheepshead Minnow (*Cyprinodon variegatus*), Larval Survival and Growth Test, method 1005.0
- E. Inland Silverside (*Menidia beryllina*), Larval Survival and Growth Test, method 1006.0
- F. *Mysidopsis bahia*, Survival, Growth, and Fecundity Test, method 1007.0

VIII. REFERENCES

1. NJPDES Monitoring Report Form Reference Manual October 2007
http://www.state.nj.us/dep/dwq/pdf/MRF_Manual.pdf

2. USEPA. 2002. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms. EPA-821-R-02-014. October 2002. Third Edition.
3. USEPA. 2002. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. EPA-821-R-02-013. October 2002. Fourth Edition.

**CHRONIC WHOLE EFFLUENT TOXICITY TESTING
TEST CANCELLATION / RESCHEDULING EVENT FORM**

**THIS FORM IS TO BE COMPLETED AND SUBMITTED TO THE DEPARTMENT DIRECTLY BY THE
LABORATORY CONDUCTING CHRONIC TOXICITY TESTS WHENEVER A CHRONIC TOXICITY TEST
IS PREMATURELY ENDED FOR ANY REASON**

NJPDES No.: _____

FACILITY NAME: _____

LOCATION: _____

CONTACT: _____ PHONE: _____

CANCELLATION EVENT:

LABORATORY NAME / NUMBER: _____

CONTACT: _____

TEST START DATE: ____/____/____ TEST END DATE: ____/____/____

REASON FOR CANCELLATION: _____

When is retest scheduled to be performed?

EFFLUENT SAMPLING:

SAMPLING POINT / DESCRIPTION OF SAMPLING SITE: _____

SAMPLING INITIATED: DATE: ____/____/____ TIME: _____

SAMPLING ENDED: DATE: ____/____/____ TIME: _____

NUMBER OF EFFLUENT SAMPLES COLLECTED: _____

SAMPLE TYPE (GRAB/COMPOSITE): _____

RECEIVED IN LAB BY/FROM: _____

METHOD OF SHIPMENT: _____

(ALL APPLICABLE RAW DATA SHEETS MUST BE ATTACHED)

c: Permittees authorized agent.